Inclusive Education Strategies:
A Textbook

University of Minnesota, United States of America

Armenian State Pedagogical University, Republic of Armenia

UNICEF Armenia

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Acknowledgments

Contributing Authors in Alphabetical Order

United States of America

Brian H. Abery, University of Minnesota
Erik W. Carter, Vanderbilt University, Tennessee
Elizabeth Criswell, University of Minnesota
Marietta N. Janecky, Holland Center, Minnesota
LeAnne Johnson, University of Minnesota
Christopher Johnstone, University of Minnesota
Michael Lovett, University of Minnesota
Kristen McMaster, University of Minnesota
Susan O'Connor, Augsburg University, Minnesota
Charissa O'Neill, University of Minnesota
Renáta Tichá, University of Minnesota
Sheila Williams Ridge, University of Minnesota

Republic of Armenia

Armenuhi Avagyan, Armenian State Pedagogical University
Tereza Azatyan, Armenian State Pedagogical University
Marianna Harutyunyan, Armenian State Pedagogical University
Lilit Karapetyan, Armenian State Pedagogical University
Siranush Karapetyan, Armenian State Pedagogical University
Marine Marutyan, Armenian State Pedagogical University
Mher Melik-Bakhshyan, Armenian State Pedagogical University
Zhanna Paylozyan, Armenian State Pedagogical University
Alvard Poghosyan, UNICEF Armenia
Araksia Svajyan, Armenian State Pedagogical University
Vergine Yesayan, Principal of Special School, Yerevan

Portugal

Paula Frederica Hunt, Disability, Education & Development, Lda.

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Foreword

Inclusive education assumes that students — diverse and unique — are learning side by side within the same school and classroom context. It treasures the unique contribution each student brings to the learning process. However, this definition somehow conceals the complexity of the phenomenon of educational inclusion. The definition of inclusion has changed over time, increasingly requiring appropriate inputs, strategies and benchmarking. There are many issues and challenges to be solved regarding the development of social and academic skills of children with disabilities, including teachers' education and training, social and physical environment adjustments in schools, as well as parents' expectations, attitudes and beliefs. Furthermore, in order to implement promising practices of inclusive education in schools and in the community, a commitment to the principle of inclusion from policy makers, universities, schools, NGOs, parents and others involved are necessary.

The system of inclusive education in Armenia was officially embraced in 2003 as a national policy. So far, many local and international organizations have launched different programs and projects aligned with the newly adopted system to support teachers and children with disabilities. Thus, many schools currently have children with disabilities, but so far, not many teachers have taken part in training or educational programs to utilize the strategies and services for these children in general education classrooms. At present, despite the tremendous need, there is no institutional arrangement or special enhancement program for teachers in Armenia to prepare them for the inclusive classroom and children's diversity. Moreover, most of the existing research evidence on the benefits of inclusion in schools is provided by European countries and the United States of America. From this perspective, the value of this book — as a unique and pioneering piece of evidence for Armenian readers —

seems to be immeasurable. Every chapter of the book refers to the issues that children with disabilities, general education teachers, multidisciplinary team members as well as school principals and parents face every day.

I must extend my sincerest appreciation to project staff from the University of Minnesota, who have greatly contributed to this book with their expertise. I am convinced that this volume will act as a source of knowledge, a guideline and an academic tool for grounding the pertinent practical work of teachers already working in the field as well as future teachers who are currently involved in the teacher training program at Armenian State Pedagogical University (ASPU).

Furthermore, special regard should be given to the project members from the Faculty of Special Education at ASPU, who have invested their efforts in preparing a book relevant to the Armenian context based on their considerable experience and through discussions and individual contributions to each chapter and topic involved.

I must also particularly highlight how much ASPU appreciates the prominent role of UNICEF — the world's leading advocate for children — in the creation of the present book. Without the corresponding financial support, professional assistance and multitask involvement of this organization, this book would have never materialized.

So, I am hopeful that a considerable number of readers nationwide will continue to be a part of team structures in inclusive education. This volume is also aimed at interdisciplinary team members and those who decide how best to include a child in the learning process with their peers. This book has been compiled to provide everyone with the information they need to deliver optimum and efficient education to chil-

dren with disabilities. Thus, I wish our readers all the best and express my gratitude for working in this important field.

Finally, my utmost desire is to see our joint efforts providing effective support for children with disabilities!

Mher Melik-Bakhshyan,
Vice-Chancellor in Charge of Academic Affairs
Armenian State Pedagogical University

CHAPTER 1:

Introduction

Alvard Poghosyan, UNICEF Armenia

This introduction provides background information about the inclusive education movement in Armenia, describes the aims of the partnership between the University of Minnesota, UNICEF, and the Armenian State Pedagogical University, and briefly outlines the textbook.

Since the 1990s, Armenia has adopted several important documents, both international and national, that contributed to the expansion of inclusive education policies and practices in the country. Armenia ratified the UN Convention on the Rights of the Child (CRC) in 1992, the Inclusive Education Concept Paper was adopted in 2005, and the UN Convention on the Rights of Persons with Disabilities (CRPD) was ratified in 2010, thus confirming the country's political will to ensure the rights of persons with disabilities to family life, education, health, rehabilitation, work and employment, social protection; participation in cultural life, leisure, and sport. Just after the ratification of the CRPD, the adjustment process of the social sector regulatory framework to the requirement of the convention took place. Specifically, the education sector changes include: application of the WHO International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY) for special education needs assessment, the amendments to the Law on Mainstream Education followed by development of bi-laws to support the implementation of the Law, and an action plan for implementation of fully inclusive general education system which has been endorsed since 2014.

While inclusion is a wider concept framed within the context of international discussions around the United Nations organizations' agenda of "Education for All" (EFA), stimulated by the 1990 Jomtien Declaration, the Ministry of Education and Science (MoES), national and international NGOs, universities, schools, and UNICEF Armenia have played an important role in bringing attention to the need for inclusion of children with disabilities in general education settings as children with disabilities remain the largest group of children out of school or in boarding institutions. While there are numerous pieces of legislation in place that promote de-institutionalization programs and accelerate progress of inclusive education practices in

Armenia, there are still barriers at the societal and educational levels in ensuring that children feel included and successfully educated alongside their peers. In 2003, Armenian education reforms were directed toward the development of new approaches and the promotion of quality education, particularly through changing the classroom learning environment and concentrating on student-centered approaches, especially cooperative learning (Duda and Clifford-Amos, 2011). However, legislative education reforms often take a long time to implement and require continuous monitoring and accountability procedures to succeed. One of the key issues today is the lack of preparedness of general education teachers to teach students with disabilities and create an inclusive setting in the classroom. Anapiosyan, Hayrapetyan, and Hovsepyan (2014) reported that 90% of teachers lacked teaching methodologies that would effectively include children with disabilities in class activities. This shortcoming often leads to either poor quality inclusion or even to exclusion. Because of Armenia's Soviet history, there are residual approaches and stereotypes about the teaching process, and teacher-centered education is still the norm. Thus in recent years, the Armenian government has considered education for teachers a most urgent priority for ensuring equity and quality in access and learning.

In line with government priorities for teacher education, in 2015 UNICEF sent out a call for proposals to identify a university that could propose a training, technical assistance, and curriculum development process to enhance preservice teacher training capacities in inclusive education (IE) in Armenia. Upon completion of a competitive process, the University of Minnesota's (U of M) Global Resource Center's (GRC) proposal was selected and UNICEF signed a two-year contractual agreement with the University. The offer included a comprehensive action plan aimed to work with Armenian State

Pedagogical University (ASPU) to align their professional education programs and curriculum with the international standards and practices for inclusive education.

Within the framework of the above-mentioned contract, UNICEF facilitated a collaboration between U of M and ASPU to develop this textbook as an information and teaching resource for academics, preservice and in-service general and special education teachers, specialists in inclusive and special education, and administrators. The U of M team reviewed the BA and MA IE syllabi and shared a detailed proposal with ASPU faculty to update the following four courses —

1. Theory and Practice of Inclusive Education (BA);
2. Assessment in the context of inclusive education (BA);
3. Psychological-Pedagogical Support in Inclusive education (MA);
4. Instructional strategies for Inclusive Education (MA).

The main suggestions included strengthening evidence-based content in relation to IE that could be applied on a daily basis in schools and classrooms and providing information about material adaptation to the Armenian context and the latest reforms in its education system.

This textbook complements the above-mentioned courses and will serve as a methodological resource. The team of American and Armenian professors worked together on selecting appropriate texts and other materials that would enhance the utility of ASPU inclusive education syllabi. The aim is to institutionalize and sustain teacher preparation efforts in line with Article 24 of CRPD, which requires "States to ensure that all teachers are trained in inclusive education based on the human rights model of disability. The core content of teacher education must address a basic understanding of human diversity, growth and development, the human rights model of disability, and inclusive pedagogy, including how to identify students' functional abilities -strengths, abilities and learning styles- to ensure their participation in inclusive educational environments".

The reader will have an opportunity to develop an understanding of how the American education system moved from exclusion of children with disabilities to their integration in the regular system, and finally to more inclusive practices. The journey is challenging yet simultaneously rewarding as it has contributed to an accumulation of considerable knowledge on learning and teaching in diverse environments. The authors also present the Armenian approaches and strategies for making the education system inclusive in the face of remaining challenges ahead. Through comparative analysis, the textbook offers a wide spectrum of tools, methodologies, and practical evidence-based strategies that have been tested, evaluated, and demonstrated to be effective for all children, including children with disabilities, developmental delays, and other special education needs.

Why the American Experience?

The United States of America (USA) has not ratified the UN Convention on the Rights of the Child (UNCRC) and the Convention on the Rights of Persons with Disabilities (UNPRPD), and one will probably not find the term *inclusive education* in U.S. laws regulating the education system. The country has, however, developed a sound legal education framework and generated considerable evidence-based classroom practices that make inclusion the desired norm. Education is a right for every child based on the USA's constitution. Since 1965, the U.S. federal government passed the Elementary and Secondary Education Act (1965), No Child Left Behind Act (NCLB; 2002), and the Individuals with

Disabilities Education Act (IDEA; 2004), all laws that became a basis for welcoming all children — including children with disabilities — into the education system. These laws require states to establish ambitious goals for all students and develop the capacity of schools to identify and serve the diverse needs of all students.

What is Inclusive Education?

The term *inclusive education*, used throughout this textbook, considers an understanding of inclusion as an approach to education for all children. At the core of inclusive education is the human right to education. Various international documents specify the principles of inclusion for guiding the states towards their efforts to introduce rights-based approach to education. According to UNICEF, an education system is inclusive if it "includes all students, and welcomes and supports them to learn. No-one should be excluded. Every child has a right to inclusive education, including children with disabilities" (UNICEF, 2017). This statement is very much in line with UNCRPD General Comment n.4 regarding inclusive education as "a fundamental human right of all learners" and "a principle that values the well-being of all students, respects their inherent dignity and autonomy, and acknowledges individuals' requirements and their ability to effectively be included in and contribute to society" (the United Nations, 2006). UNESCO views inclusion as "a dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems, but as opportunities for enriching learning" (UNESCO, 2005).

It is important to consider inclusion as a continuous process of systemic reform that envisages changes in teaching and the curriculum, school buildings, classrooms, play areas, transport, policies and strategies in education with a vision to provide all students of the relevant age range with an equitable and participatory learning experience and the environment

that best corresponds to their requirements and preferences. Therefore, the move towards inclusion is not simply a technical or organizational change, but also a movement with a clear philosophy. For inclusion to be implemented effectively, countries need to define a set of inclusive principles together with practical ideas to guide the transition towards policies addressing inclusion in education (UNESCO, 2005).

Recognizing that educational inclusion is a broader concept that applies to all groups of children, the authors focus on children with disabilities as one of the major groups that remain excluded due to prevailing social, cultural, and attitudinal barriers. In addition, throughout teacher education in Armenia, inclusion needs are still an optional topic in preservice teacher training courses (mainly related to special education), state-funded teacher trainings, and donor-funded training initiatives. A considerable gap exists between preservice and in-service teacher training programs, especially in terms of a holistic approach based upon the bio-psycho-social model of disability.

How to Use the Textbook?

This textbook, co-authored by U.S. and Armenian experts in inclusive education and related fields, is designed to be used by university faculty and lectures, preservice and in-service teachers, education specialists as well as policy makers who are working to provide, manage, or support education services. The textbook contains 15 chapters with tools and methodologies that will help a teacher in a diverse classroom to create an inclusive, learner-friendly environment. Three online learning modules on Co-Teaching, Universal Design for Learning, and Instructional Strategies for Inclusive Classroom as well three webinars on Formative Assessments for Students with Mild and Significant Disabilities and Peer Assisted Learning strategies as well as a film Education for Every

Child: Armenia's Path to Inclusion accompany the textbook in providing additional insights and resources.

The textbook begins with a forward by the Vice-Chancellor in Charge of Academic Affairs Armenian State Pedagogical University, followed by an introductory chapter written by a senior education officer at UNICEF Armenia that provides background for the US-Armenian collaboration and outlines the remainder of the textbook. The next 13 chapters focus on specific topics of inclusive education, all written together by U.S. and Armenian authors. The concluding chapter is a reflection on the content covered in the textbook as a whole by an international expert in the field. Each of the main chapters begins with a brief overview of the chapter content, guiding questions, main text, tips for teachers, thoughts for leaders, additional resources, glossary, and references.

Additional Resources

UNICEF (2014). Conceptualizing inclusive education and contextualizing it within the UNICEF Mission, Webinar 1 and Companion Booklet 1. *Series of 14 Webinars and Companion Technical Booklets on Inclusive Education*. Geneva, Switzerland: Author. Retrieved from: Retrieved from https://www.ded4inclusion.com/inclusive-education-resources-free/unicef-inclusive-education-booklets-and-webinars-english-version

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CHAPTER 2:

Universal Design for Learning

Christopher Johnstone, University of Minnesota

Armenuhi Avagyan & Marine Marutyan, Armenian State Pedagogical University

This chapter focuses on Universal Design for Learning as a pedagogy that can facilitate inclusion. Universal Design is a way for teachers to support all students' learning, even if those students learn differently.

Before reading this chapter, ask yourself the following —
- In what ways can Universal Design help teachers to organize the teaching and learning process for diverse students?
- Identify some of the differences between Universal Design for Architecture and Universal Design for Learning.
- In what ways can high- and low-technology approaches be used to implement UDL?
- In what ways might UDL improve the quality of education in inclusive classrooms?

Introduction

The term *Universal Design* was first used by the U.S. architect, Ron Mace, to describe a philosophy of how to create buildings that are accessible to everyone, including those with disabilities. He famously said "Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."[1] Mace was a wheelchair user and became tired of asking for buildings to be changed in order to allow for physical accessibility. He suggested instead of anticipating needs for accessibility from the beginning would save time and money, and improve the experience for everyone.

Universal Design is intended to broadly support accessibility and can be useful for persons with and without disabilities. It is an important design principle for all buildings. However, Universal Design can be found in many examples beyond architecture. For example, a Universal Design approach that is known to YouTubers is the use of closed captioning (CC). This captioning was originally designed to allow for persons with hearing impairments and is now widely used on television and videos. The design is "universal" because it supports accessibility for persons with hearing impairments but also is very useful for many others, such as persons who are learning the language used in the vid-

eo and can benefit from reading words; those who wish to watch television while their partner is sleeping; or those who might be in a loud area while watching a video and cannot hear all the information. Other examples of Universal Design abound, including curb cuts (which support wheelchair users, parents walking students in strollers, bicycle riders and others); audiobooks (which are used by persons with and without visual impairments) and 'ringing' elevators that alert both persons with visual impairments and those engrossed in their smartphones that an elevator is coming.

In Armenia, many buildings are historic in nature so Universal Design is challenging. In many cases, buildings are retrofitted to improve physical accessibility. This is a generally accepted practice, but outcomes are often mixed. Some accessibility approaches (such as creating ramps, installing handrails, etc.) have been very effective for improving accessibility, while others have been less helpful. In general, Universal Design for architecture is an emerging way of thinking about design of new buildings in Armenia.

Universal Design and Education

In the early 2000s the principles of Universal Design were transferred to educational practice and renamed Universal Design for Learning (UDL). The practice became part of the inclusion movement, which focused on changing systems of education so that they are respon-

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1   See https://www.ncsu.edu/ncsu/design/cud/about_ud/about_ud.htm

sive to all students, regardless of disability or other characteristics. David Rose and Anne Meyer (2005) described UDL as providing students multiple means of presentation, allowing multiple means of response, and facilitating multiple means of engagement. UDL's underlying tenet is that academic content is the most important aspect of the academic experience, but that teachers should provide a variety of pathways for students to engage with content and demonstrate mastery. This approach focuses on the whole class and finding ways to be responsive to (and respectful of) students' personality, life experiences, learning style, cultural background, religious background, disability status and language abilities.

Universal Design and Special Education Needs

One important contribution that UDL makes to inclusion is its focus on student diversity. For example, in Armenia, steps are being taken to reframe understandings of disability by professionals. Strategies like examining human differences through students' literature (Avagyan, Baghdasaryan, & Sargsyan, 2016) and development of new norms in teacher development are improving understanding and acceptance of human diversity. For example, the purpose of assessments for students is shifting from a perspective and focus on the problems a student has to a perspective that a student has resources and potential within the context of inclusive classrooms. Avagyan et al. (2016) described this change —

> During Soviet years the working assumption was that all the people were 'like each other,' perfect, beautiful, without problems, without disorders; all those who did not meet those criteria (who had visual, auditory, physical, mental, even speech and communication limitations) grew up and spent their lives in special

> boarding institutions, segregated from their families and society. (p. 156)

In Armenia today, there is increasing recognition that all humans have differences in how they process information, recognize patterns, engage with information and are motivated by certain teaching techniques (see Vygotsky, 1962). A UDL approach, then, focuses on the fact that there is a wide variety of students in any school, with a wide variety of needs. UDL moves away from a narrative that labels students 'normal' and 'abnormal' learners or those who need regular or special education (Rose & Meyer, 2005).

Differentiated Instruction and Universal Design for Learning

Both special and regular educators are familiar with the concept of *differentiated instruction*. This broad concept allows teachers to adjust the level of challenge in particular topics to meet the individual needs of their students. For example, a teacher might increase or decrease the number of new vocabulary words that a student must learn when beginning a new lesson in history, science or Armenian language. Differentiated instruction has been used in inclusive classrooms around the world and is based on Vygotsky's "Zone of Proximal Development" (1978) theory, whereby students work best when asked to accomplish tasks that are moderately difficult, but neither overwhelmingly challenging nor too easy. Kauffman and Hallahan (2011) refer to this as the 'just barely manageable' approach — putting learning tasks at a level that is difficult, but not too difficult to handle.

Differentiated instruction may be part of the UDL process, but UDL scholars have noted that changes to the standard or expectations of learning for some students may be less necessary if such students are offered a variety of ways to learn material. Edyburn (2007, 2010),

for example, has presented cases of students with learning disabilities whose learning only became effective when teachers moved beyond traditional lecture and print-based materials. In such situations, the need for learning accommodations and modifications may be reduced when lessons are designed with flexibility in mind. Specifically, when the learning needs of students are anticipated and accessibility is built into lesson planning, all students may be better able to learn.

Framework for Universal Design for Learning

The principles of Universal Design for Learning are grounded in three types of learning: recognition learning, strategic learning, and affective learning. *Recognition learning* refers to a student's ability to recognize and remember concepts. This is usually facilitated through teacher activities or reading from text. *Strategic learning* refers to a student's ability to respond to particular content, concepts or skills. Strategic learning requires that students can both recognize a concept and be able to respond to it. This type of learning is often demonstrated through writing tasks or verbal comments in class. *Affective learning* refers to a student's motivation for learning the concept. Without motivation, students will have a less robust learning experience (Clampa, 2014; Malone & Lepper, 1987; Mega, Ronconi, & DeBeni, 2014). An overview of the three types of learning is presented here (*see Box 1 in the next column*).

Box 1. Three Types of Learning

1. **Recognition** — Students recognize and remember the characters in a book.
2. **Strategic** — Students produce a book report analyzing the plot of a story.
3. **Affective** — Students discuss the book through a 'book group' that discusses both events and personal feelings about the book's characters.

Principles of Universal Design for Learning

UDL has three main principles that allow teachers themselves the opportunity to plan according to the needs of their students. UDL principles align with a philosophy that embraces differences in learners. Teachers can enhance learning for students with different profiles by providing flexibility in opportunities for recognition, strategic learning and affective learning. Such flexibility in teaching disrupts the traditional method of teacher lecturing, students taking notes and students eventually taking an exam on content. The lecture/notes/exam method may create barriers to students who have trouble understanding the teacher's voice, creates challenges for students who struggle with writing or memorization, and creates barriers for students who learn better in active environments or in small groups. Lectures, notes and exams may all be part of a Universal Design approach, but they are only one method of many that should be used in a flexible learning classroom. The three principles of UDL are presented below —

1. To support recognition learning, provide multiple, flexible methods of presentation.
2. To support strategic learning, provide multiple, flexible methods of expression.
3. To support affective learning, provide multiple, flexible methods of engagement.

There may be overlap in particular teaching and learning activities in each of the principles because flexible lessons will allow for multiple activities. For example, in the box above, the motivating teaching strategy of student participation in a book group is an example of both affective (motivating) learning and strategic (application) learning. In the sections below, we will provide concrete examples of ways to introduce flexible methods of presentation (how teachers present), expression (how students respond), and overall engagement.

Universal Design and Inclusion

Using Universal Design in a classroom has great potential for improving inclusive practice. Universal Design seeks to eliminate the distinction between 'special' and 'regular' learners, with the assumptions that each individual learns differently and that providing a variety of experiences will help all students. At the same time, Universal Design is more than just "good teaching." According to Edyburn (2010), Universal Design is both a philosophical stance that teachers take (proactively valuing diversity) and a skill they must learn and improve over time. It is not easy to have a universally designed classroom. However, when teachers fundamentally value having students with different abilities in their classrooms, and design their classrooms to ensure all students can benefit, UDL efforts improve. There are a wide variety of teaching strategies that teachers can use to promote Universal Design and therefore inclusion in the classroom. Some of these strategies are described in the paragraphs below. As teachers begin to know their students throughout a school year, while using information sources such as student records, they can best tailor their instruction to fit the needs of their students.

At the same time, Universal Design philosophies align with the broader philosophies mentioned in the Convention on the Rights of Persons with Disabilities (United Nations, 2006). The Convention outlines a broad approach to supporting persons with disabilities through inclusive education. Such inclusion requires educators to provide accessibility for all people. According to Article 9 of the Convention —

> To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility.

On a practical level, flexible instruction may vary from classroom to classroom. For example, it may mean the use of multiple methods within each category of *presentation, response,* and *engagement,* but may also mean that teachers employ flexibility and improve accessibility *within* particular activities. For example, a teacher may show a video to a class and use the CC function so that students can also read the closed captioning. This might be considered an accommodation for a student with a hearing impairment, but provides a flexible way for all students to understand content. Additional examples of how teachers can provide flexibility in their classroom are presented (*see Table 1 on page 12*).

Table 1. Universal Design Examples

Flexible means of presentation	Flexible means of response	Flexible means of engagement
Experience Drama Video ***Shared experiences*** Drawings Concrete presentations (e.g., Legos, blocks, models) PowerPoint Advanced organizers	Drama Response cards Artwork Oral reporting Written essay Poems, songs ***Concept mapping***[2] Note-taking Diorama PowerPoint ***Advanced organizers*** Small group conversation ***Peer learning*** Meetings with teacher Presentation to class Frayer model[3]	***Experiential learning*** Choices ***Self-assessment*** ***Peer assessment***

2 See https://www.cmu.edu/teaching/assessment/assesslearning/conceptmaps.html
3 See wwws://www.youtube.com/watch?v=AdjN09VouaU)

Teachers employ UDL when they *design* lessons (a conscious action) that incorporate flexible means of presentation, response and engagement. Teachers should note that they should not feel like they must use all strategies in Table 1 every day, but can incorporate some strategies each day and also allow for flexible ways for students to learn material. Different examples of how a lesson plan uses Universal Design for Learning are presented (*see Box 2 in the next column*).

Box 2. U.S. History, Universal Design Example

- A U.S. history teacher using the UDL approach might ask her students to construct an essay that compares and contrasts the industrial North with the agricultural South in the 1800s. Her focus is the thinking behind the essay, the method of comparing and contrasting, as a means to help her students gain deeper understanding of the period and the geographical locations.

- She emphasizes that there are many different approaches to constructing the essay and offers examples — outlines, diagrams, concept maps, digitally recorded 'think alouds' and drawings. She uses tools that support each of these approaches, so that students who need extra structure can choose the supports that work for

them, and she creates templates with partially filled in sections and links to more information.

- Because this is a long-term assignment, the teacher breaks the research and the writing into pieces and builds in group sharing and feedback to help students revise as they work. The teacher also provides models of the process by sharing the work of previous students who approached the problem in varied ways.

Source: Hitchcock et al., 2002, p. 13

There are many ways to implement UDL in the classroom. What specific strategies a teacher chooses to use will depend on the profiles of the students in class and the content being taught. Hitchcock, Rose, Meyer, and Jackson (2002) provided several examples of lessons that use UDL. These examples can be found in the article 'Providing Access to the General Curriculum' available as part of the UDL module at www.aspu.am. One example, for history, is found in the box to the right.

ILPs and Universal Design

In Armenia, students with special education needs have individualized learning plans. There are three main aims of individualized learning plans. These are *access*, *participation* and *progress*. Each of these terms is described below in the context of Universal Design.

Access

Historically, students with disabilities have attended special schools designed to provide therapeutic services for disabilities. Students with disabilities were schooled in separate locations, creating circumstances where they were effectively hidden from mainstream schools and society. When Armenia made a commitment to inclusion, it changed its focus from a *service-based* model to a *rights-based*

model. This means that students with special educational needs will still receive services, but greater focus has been placed on their right to participate in education in their local school. This right is covered in the first main objective of ILPs: access. As students with disabilities move from special to regular schools, teachers are responsible for ensuring that students can access the content they are teaching.

One way to think about access is through distinguishing *access* and *target* skills (Kettler, 2014). For example, a teacher may be presenting on topics in history or mathematics. In history, the target skill is for a student to identify important dates in history. In mathematics, the target skill may be double-digit multiplication. However, because of a student's impairment, she or he may not have the access skills necessary to reach the target skill. For example, if a student has difficulty decoding words in a history book or writing numbers because of a physical impairment, that student will never be able to reach the target skill.

However, if a teacher understands that the *target* skill is the main goal, she or he can employ Universal Design strategies so that the student can reach target skills in different ways. For example, in history, the information might be presented orally, through video, or discussion. In mathematics, the teacher may allow the student to use technology or three-dimensional objects (e.g., blocks) to complete mathematics problems. In either case, teachers can use Universal Design philosophies to help students accomplish target skills.

Participation

Similar to access, all students have the right to actively participate in their classes. Such active participation will take special planning on the part of teachers, and Universal Design principles may help in this planning. For example, a student with a special educational need may have difficulty with speech, so verbally sharing

with a classmate may be impossible. In a Universally Designed classroom, verbally sharing with a neighbor may be one approach to participation, but the teacher may also employ strategies like using drawings to communicate information, teaching all students to use technologies to communicate with one another or teaching students hand gestures for responding to information. Although technologies and gestures may be specific strategies for supporting a student with a disability, they may be effective for other students as well, thus creating a universally designed classroom experience.

Progress

Inclusion goes beyond simply encouraging the presence of students with disabilities in regular classrooms. All students should be expected to make progress in their school. The difference between an inclusive and a special education model is how student evaluation is used. In a special education model, if students are not making progress, it is assumed to be the result of a student's impairment or shortcoming, and special provisions are made for the student. In an inclusive setting, if a student is not making progress, teachers and administrators look at the school, the system and the classroom to determine what types of barriers are preventing the student from learning. Once these barriers are identified, a plan of action is put in place to help the student progress. This plan may include extra help, but teachers will first examine how the classroom experience may be impeding learning. Teachers may ask —

- Are there access skills I am requiring in order to meet target skills and can these be changed?
- Have I tried teaching the material in different ways so that I might best meet the learning style of the student?
- Are there better ways for me to help the student demonstrate what they know?

- Are there aspects of the classroom that may be impeding the student's learning (e.g., boring atmosphere, poor lighting, bullying, poor seating arrangements)?

Universal Design, as the name suggests, is about designing a learning environment that can be advantageous to all learners. Its core mission is to improve inclusivity by shifting the onus of the teaching and learning process to the teacher and the way she or he organizes the classroom. This approach differs dramatically from approaches that view students as having deficits when they are not succeeding in school.

In many ways, using Universal Design for Learning considers the individualized learning needs of all students. By doing this, teachers can meet the goals of some students' individualized learning plans (ILPs, which are required for students with special educational needs (see Chapter 7) as well as the individualized learning needs of other students who do not use ILPs. In all cases, flexibility in presentation, response and engagement will allow teachers to design their lessons in a way that responds to the differences in classrooms, whether students have identified special educational needs or not.

Universal Design and Your Classroom

Applying Universal Design in the classroom requires two important commitments from teachers. First, teachers must know their students' needs so that they may plan accordingly for lessons. Second, teachers must commit to the time it takes to plan a lesson with multiple means of representation, response, and engagement. This may require additional planning time on the part of teachers as well as support for teachers from leaders. In Universally Designed classrooms, students may be working in a variety of different ways at once, and each

day the instruction may look different. School leaders must trust their teachers to design the pedagogy that works best for their own class. This may mean that one classroom goes about its work differently than others. School leaders should be supportive of such design and encourage teachers to design for the needs of their students. We provide an example of how a teacher might plan a lesson using UDL (*see Table 2 on page 16*).

A Final Note

The overview of UDL included in this chapter may at first appear to be a rehashing of ideas about 'good teaching.' Edyburn (2010), however, warns against this kind of thinking. Rather than thinking about UDL as a way to provide more engaging lessons, Edyburn sees UDL as a fundamental philosophical shift that must occur on the part of teachers in order to *design* their classrooms to include all students. Such design requires that teachers use scientific assessment data to know where the students' needs are as well as creativity to find ways to help students understand and engage with academic content.

The focus on good design (not necessarily just 'good teaching') requires teachers to be constantly diagnosing situations to ensure that the educational rights of their students are being respected and constantly planning to meet those needs. Teachers must also be always ready to adjust their designs if they are not working. The ultimate goal of multiple means of representation, response and engagement is that the different approaches that teachers use will act as tools and scaffolds (Puntembekar & Hubscher, 2005) to help students best access and independently learn material. Technologies, peer support, different ways of teaching and building upon student strengths are all ways to reach the end goal of education for all, but to reach this goal, teachers must be committed to doing things differently for different

students. The work is difficult and will require time, but the rewards of a more inclusive education system and all students learning together are worth the effort.

Table 2. Sample Plan for Universal Design for Learning

Topic of Lesson: Armenia's eleven provinces (including Yerevan)		
Objective: At the end of this lesson, students will locate the 11 provinces (including Yerevan) on a national map.		

Multiple means of representation	Multiple means of response	Multiple means of engagement
Provide blank maps to students and show them provinces on PowerPoint or blackboard. Show a video demonstrating the 11 provinces. Provide one province to each student as part of a broader 'jigsaw' activity.	Students independently fill in map. Pause the video and ask questions during the video, allow for student verbal response.	Students may work together on completing a map with a model from a book. Students share personal stories from provinces they have visited or know. Students work together to complete a 'jigsaw' map by each adding one province to a larger national map.[4]

Sequence —

1. Teacher introduces the new topic, then shows video (provides subtitles or audio description if needed).

2. At various points in the video, teacher stops the video to talk about the different provinces, their shapes, and features. Students share personal stories they may have from provinces (e.g., family connections, personal travel).

3. Next, teacher hangs 2 or 3 large blank maps on the wall (3D version if needed). These can be traced by projecting an image from a computer.

4. Students collectively place 'their' province on the larger map.

5. Students then work independently to complete a blank map on their own (small, at their desk, but with 3D or enlarged copies as needed). Students may work together or use books as needed.

6. Teacher tells about future activities (e.g., quizzes) to assess students' knowledge.

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4   Additional adjustments may be made according to student sensory need (e.g., tactile maps, enlarged maps, partner support for mobility in the classroom, sign language or increased gesturing by teachers/aides, use of technology for communication).

Tips for Teachers

- Universal Design is about creating lesson plans for everyone. This requires thoughtful approaches to make sure lessons are accessible to all.

- Students can receive information in a variety of ways. It may be visual, auditory, tactile or through multimedia. Providing flexibility in how students receive messages will enhance accessibility.

- Students can 'show what they know' in a variety of ways. This may be through writing, speaking, assessments, drama, art and other demonstrations. Providing students with flexible ways to demonstrate their knowledge will lead to greater accessibility.

- Students need to be engaged to learn. Each student has her or his own level of development, achievement, learning style and capabilities. Thinking about different ways to engage students will help keep students interested in learning.

- Accommodations for individuals may still be necessary in a universally designed classroom. UDL is intended to be flexible for all students, but some students will still need individualization.

Thoughts for Leaders

- Universal Design is all about instructional design. Encourage teachers to think about planning for lessons that allow flexible ways for students to learn new concepts. This may mean that they need time for planning.

- Universally Designed classrooms are often active, because students will be learning concepts in many different ways at once.

- Encourage teachers to be creative in thinking about new ways to help students learn. Trust their ideas in relation to flexibility and accessibility.

- Universally Designed classrooms do not necessarily need high-tech devices. Teachers can employ flexibility with readily available materials.

- Universally Design can also be applied to assessment. In this case, the construct (what is being assessed) should remain a constant, but the process (how students show their knowledge) can be flexible.

Reflection Questions

- What connections are there between using individualized learning programs and universally design for learning for students?

- In what ways can Universal Design for Learning change the teaching and learning process in Armenia from current practice?

- What types of strategies that you learned from this chapter would you like to use for presentation, response, and engagement in your practice?

- Provide an example of Universal Design that you have seen in practice.

Additional Materials

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Glossary

Advanced organizers — Any process used by teachers to help students understand a concept before it is actually taught. These might include discussions, maps of concepts, outlines of data. Students can use advance organizers when they are learning new concepts to help them understand connections between multiple concepts.

Affective learning — A student's motivation for learning the concept. Without motivation, students will have a less robust learning experience.

Concept mapping — A graphical (drawing or technology-created) representation of student's thinking on a particular topic. The map provides teachers information on how the students organize information in their minds.

Experiential learning — The process of learning through experience, or learning by doing.

Flexible means of engagement — Allows multiple ways to work with educational content and ideas. This might mean that students have choices in assignments, participate in experiential education or assess their own understanding of the content. In all cases, the content remains the same, but students can work with it in different ways that best suit their learning style.

Flexible means of presentation — A teacher can present or 'deliver' information to students in a variety of ways. Traditionally, teachers use lecture styles to present information, but flexible presentation may mean that a variety of sensory inputs are used for students, other people besides teachers may present, or other ways of accessing information are used (e.g., video sources, visuals/sounds, art, guest speakers).

Flexible means of response — Students can respond in a variety of ways to show they understand information. Flexible means of response might be through speaking, writing, sign language, visuals (e.g., drawings), conversation or projects. The main idea of flexible means of response is that students can demonstrate knowledge in a way that is best for them.

Peer assessment — A process where students in the class quiz or assess each other on content. One strength of peer assessment is that students focus more on their learning and may be less focused on earning marks. Peers can then help correct their partners if they misunderstand information. Care must be taken to ensure students do not victimize or tease each other for incorrect answers.

Peer learning — Any educational process that involves peers supporting each other's understanding of concepts. Peer groups may be homogeneous (about the same abilities) or heterogeneous (different abilities, when certain peers can help others).

Recognition learning — A student's ability to recognize and remember concepts.

Regular learners — The idea that there is a standard group of students in every school who are 'normal.' Universal Design theory states that every learner is unique and has their individualized needs.

Self-assessment — Based on benchmarks provided by teachers, students can evaluate

their own work, identify their own gaps in learning and focus their learning.

Shared experiences — When students participate in 'experiential learning' (learning by doing), an important part of the process is a reflection on the experience that the students shared. By having a common experience, students can later communicate what they experienced as a means of understanding new concepts.

Special learners — The misconception that students with special education needs have definitive differences from students who do not have special education needs. Universal Design theory promotes the idea that all students have individualized needs that should be addressed in classrooms.

Strategic learning — When students both recognize a concept and are able to respond to it. This type of learning is often demonstrated through writing tasks for verbal comments in class.

Universal Design — Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design (Center for Universal Design).

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CHAPTER 3:

Multidisciplinary Teams and Co-Teaching

Susan O'Connor, Augsburg University, Minnesota

**Tereza Azatyan, Marianna Harutyunyan & Marine Marutyan,
Armenian State Pedagogical University**

This chapter explores the topics of multi-disciplinary teams and co-teaching. It discusses why multi-disciplinary teams are important and offers key elements necessary to create successful teams. The chapter introduces co-teaching as a way to practice inclusive education and provides practical ways to transition to a co-teaching model.

Before reading this chapter, ask yourself the following —

- Who are the participants in a multidisciplinary team in a school?
- What role do families play in the multidisciplinary team?
- What skills do members of the team need?
- What are the benefits of co-teaching to education?
- What is the difference between a co-teacher and a teaching assistant?

Introduction

Providing quality education to all students is a challenge for teachers. Inclusive education requires that professionals and families co-construct learning and develop the best environments for children to succeed in school and in society. Such co-construction requires not only collaboration between teachers, but a different way of working as a team. It also requires new ways of teaching so that all available resources can be best utilized. As Armenia moves toward inclusive educational practices, teamwork and collaboration are important in all levels of education.

The first part of this chapter will discuss the work of the multidisciplinary team. The chapter will explain how a team works successfully to develop, and explains what skills are needed for multidisciplinary teams to be successful. The second part of the chapter will focus on co-teaching. Co-teaching is a way to most successfully deliver content to students with and without special educational needs in the general education classroom. Both multidisciplinary teamwork and co-teaching are key components of working toward successful inclusion for all students. While the two are presented in this chapter, one does not necessarily need to be in place for the other to be implemented.

What Is the Multidisciplinary Team?

A multidisciplinary team is a group of individuals from multiple disciplines, as well as the family of the child, who meet to pursue a common goal: the success of the child with special education needs in the general education classroom. The team includes professionals, family members and, when appropriate, the child. The task of the team may vary; sometimes it discusses evaluation and other times the individualized program for the child and how all members can work successfully to support the child. The team is a group of people who, according to Villa, Thousand, and Nevin (2013) —

- Partner to achieve a shared goal;
- Believe that all team members have unique and needed expertise and skills and value each person's contribution;
- Distribute leadership throughout the team.

The professional collaboration of a multidisciplinary team helps ensure that the work regarding the child and her or his family is comprehensive — meaning that it encompasses all academic, social and functional aspects of education. The ultimate goal of the team is to serve the student and the family better. Multidisciplinary teams who meet to evaluate students for special education services have various tasks. They collect several types of data to inform the team about the students' strengths, challenges and needs, including —

- Medical history, educational performance, and the like;
- Formal assessments;
- Informal assessments, such as samples of classroom work and observations of social behavior; information that family has shared;
- A baseline of performance to guide development of an IEP and determine the effectiveness of future education.

Tasks might also include determining the need for specialized services, creating an individualized learning plan (ILP) for a student or simply coming together to discuss the needs of a child as she or he proceeds through the education system.

Who Should Be Involved on the Multidisciplinary Team

The key to providing the best services to the child is to gather information and input from a variety of people who know the child. Developing a team that brings a broad perspective base of insight into the child's strengths and needs is essential. As mentioned above, team membership is inclusive of people from a variety of perspectives. While it is common for professionals such as speech therapists, general educators and special educators, psychologists, and social workers/pedagogues to be involved in the team, the involvement of the family member(s) and, when appropriate, the child, is crucial. This represents a paradigm shift for professional teams who have, in the past, made all the decisions and then simply shared the information with the family.

In addition to the key players mentioned above, it is important to think about team members more broadly as 'professionals and parents.' Participants in the multidisciplinary team may also include extended family members who play a critical role in the support of the child; this might include siblings, grand-parents or others who are close to the child or have caretaking responsibilities. Community members who know the child in a more personal way may also be included. For example, a child may be nonverbal in the classroom but when going to the neighborhood store, the child may communicate in ways not observed in a more formal school setting. Such information on outside participants may provide valuable insights to educational planning teams.

Depending on the specific needs of the child, there may also be a need for additional specialists who are part of the team. This might include members from outside the school setting such as individual therapists who meet with the child privately. The goal is to bring together people who work with and know the child closely and across multiple settings. At the same time, given this broad group of stakeholders, it is not only important to choose the participants wisely but to limit the meetings, to the highest degree possible, to a manageable number of participants. This is especially important for families who might become overwhelmed if they feel outnumbered by professionals. Manageable group size is an important aspect of developing group trust.

Once the team is determined, one or two people should be designated to take on the leadership role in the group. Ideally, this should be determined by the team, but the team leader role often falls to the teacher, psychologist or the person most closely involved with the child (Azatyan, 2015). Ideally, co-leadership will occur. Co-leadership might be a shared leader role between a teacher or another professional and a family member. This only occurs once the family member becomes comfortable with the group, which takes time and trust within the team. The following list highlights key tasks that different members may consider.

Roles and Tasks of Key Multidisciplinary Team Members

Team coordinator

Completes administrative arrangements for team meetings, such as scheduling the date, time and place for meetings —

- Identify critical personnel and invite them to the meeting;
- Invite parents to the meeting;
- Chair the meeting or appoint a designee;
- Encourage each team member to participate actively during the meeting;
- Ensure that each person knows what action the team recommends, who is responsible for implementation and what resources are needed to support implementation adequately;
- Communicate administrative support of the team to all members of the school community;
- Promote the commitment of resources based on needs.

General education teachers

In inclusive classrooms, the general education teacher and the special education teacher should have shared and equal responsibility for all the children in the classroom. Typically, the general education teacher's role is devoted to the instruction of subject matter in the classroom. However, in a collaborative team, the role of the regular education teacher is expanded to include —

- Primary formal assessment;
- Input into the individualized plan (help to develop, review and revise);
- Help in determining appropriate interventions and strategies for the student;
- Help in determining program modifications for the student;

- Identify supports that school personnel need to help the student progress in the general curriculum;
- Maintain communication between the school and home, though this can be shared with the special education teacher. The teacher keeps parents informed about the student's educational achievement, reports grades and explains the educational program.

Special education teacher

The special educator's role is that of individualizing and modifying curriculum. As a member of the multidisciplinary team, the special education teacher can offer suggestions for modifying instruction, consulting with the general education teachers and identifying resources and alternative learning materials. Additional tasks include —

- Provide assessment and instructional planning for the student in the general education setting;
- Provide consultation to the regular class teacher (co-teaching);
- Participate in the school assessment and eligibility team;
- Search for ways to include students in special education into all aspects of the schools' program including extracurricular activities.

The special education and general education teachers can help parents and students in the following ways —

- Learn as much as possible about the student from the parents;
- Provide information regarding the student's disability as well as their right to advocate and be involved in the IEP process and their role as team members;
- Help the parents during the planning of the IEP process, making sure their ideas, concerns and views are expressed and heard;

- Provide parents with reports and suggestions on how to work with their child at home;
- Assist the student and the student's parents in the planning of the student's future after leaving school;
- Act as the student's advocate, i.e., represent the interests, preferences and rights of the student or parents;
- Make sure that students are taught to be active participants in their own school process. They should be taught self-determination skills and how to set their own life goals and objectives.

School psychologists

May assume the following responsibilities —

- Complete an assessment of the child;
- Analyze and interpret assessment data for families and other team members;
- Participate in identification of curricula modifications and instructional interventions appropriate to the identified needs of the pupil;
- Conduct follow-up observations to determine the success of modifications and interventions.

Speech therapist

Contributes to the team in the following ways —

- Complete a thorough assessment of the child with special educational needs;
- Collaborate with families and other team members;
- Participate in identification of curricula modifications and instructional interventions appropriate to the identified needs of the student;

- Conduct interventions (i.e., develop communication skills, reading and writing skill development);
- Conduct follow-up observations to determine the success of modifications and interventions.

Social worker/pedagogue

Contributes in the following ways —

- Complete assessment of the child;
- Cooperate with families and other team members;
- Organize home visits;
- Collaborate with support organizations outside of the school.

Occupational therapist (OT)

Contributes in the following ways —

- Complete an OT assessment;
- Share ideas with the teacher to support the child in the learning environment. This might include working on handwriting or fine motor skills so the child can complete written assignments and helping the child organize himself or herself in the classroom (including workspace in and around the desk);
- Work with the teacher to modify the classroom and adapt learning materials to facilitate successful participation;
- Share ideas with family members on how they can best support the child in the home environment.

Essentials of Effective Teams

A major part of working as a multidisciplinary team is teamwork. Effective teamwork requires not just inviting members (including families) to a meeting, but creating a sense of community where all members feel they have an import-

ant role in developing a common purpose and commitment to the child. Such teamwork occurs by creating equal opportunities to be heard and valued during the meeting by all others. Building a sense of community among team members requires thoughtful attention to the environment where the meeting takes place (such as the comfort of the room for parents) and how welcomed people feel. The comfort of parents is especially significant as families are welcomed into the team so that that parents know that ideas are crucial to the process and they are to be heard as well as to listen in meetings.

As discussed in Chapter 4, communication skills are also essential in establishing effective teams. Effective verbal and nonverbal communication skills play a significant role in how effective teams develop and grow. Without effective communication skills, both verbal and nonverbal, members perceive their contributions as either valued or dismissed. How information is delivered plays a key role in the positive functioning of the team. Professionals, for example, may believe they have strong communication skills because they are used to communicating extensively, but good communication skills require attentiveness to specific aspects of the communication process. Friend and Cook (2010) provide some tips on how to improve communication when working on multidisciplinary teams. Strategies like nurturing open communication, keeping communication meaningful, using silence effectively and adapting communication to match the task and the relationship can all be employed by team members to improve effectiveness. These concepts are described in the following paragraphs —

Nurture and communicate openness

This term refers to a person's ability to suspend judgment or evaluation until he or she has gathered all perspectives. Communicating openness to others lends itself to a willingness to explore joint decision-making and eliminate quick decisions that might be based on only limited information. For example, a child with autism is very active during class and throws things out the window. The team discusses, and parents add comments like, "When he does this at home, I give him music, and he listens and calms down." The team accepts this suggestion and thanks the family. This creates a sense of openness, where the family members feel heard and validated.

Keep communication meaningful

People are more willing to invest in communication when they feel it is meaningful. Team members can be selective in what they share in order to present the most meaningful information. This is especially important when families and students with disabilities are involved. Often a simple question can elicit a lengthy response by professionals. Be mindful of this. Too much information is not meaningful and can be overwhelming. Meaningful information creates opportunities for all members to speak.

Use silence effectively

Silence and pauses can be productive nonverbal communication skills. Often silence is viewed as uncomfortable and awkward or even punitive. Few of us reflect on the benefits of silence to communicate interest, concern and empathy as well as respect. In more difficult situations, silence can allow for the team to pause and reflect and possibly take the conversation in a more productive direction. Silence or a pause helps avoid interruptions or talking over another. It opens space for all members to contribute. It is important for professionals to read the social cues of the group in deciding how much silence is effective so that all voices are able to enter the dialogue.

Adapt communication to match the task and the relationship

Good communication facilitators are able to adapt their communication as it relates to the task, the individuals involved and the relationship. Questions professionals may ask themselves are: How comfortable is the family with the language that is used to describe the assessment or goals for the child? How can a professional best communicate goals? Are general and special educators understanding or agreeing with assessment data? Do members of the assessment team understand some of the drawbacks the teacher or families might have when it comes to implementation? Good communication requires reading the situation and making it meaningful for all members.

Equally important in the communication process is to think about events in meetings that might interfere with or shut down communication and divide the team. Things such as —

- Using commands or directives: "Never mind what she did! Just ignore her."
- Using 'shoulds': For example, "You should be dealing with your child more directly when they say no," or "You should be able to deal with his behavior more directly!"
- Judging and criticizing: for example, "Why did you use that method? It is not effective!"
- Labeling or stereotyping, for example: "You are like all the other psychologists; you just think it has to be done one way!"

Creating a welcoming environment and working to understand the roles and needs of the group can create effective communication in multidisciplinary teams. It takes intention and commitment to build strong teams, and strong multidisciplinary teams are essential for inclusive education to flourish. Ideas are provided (*see Table 1 below*) on how to evaluate effective teamwork.

Table 1. Evaluating Effective Teamwork

Team members are committed to their work, value sharing new ideas.	The team understands its goals and has a clear sense of purpose.
Team members are flexible and take on roles that help the process move forward. Members can take on different roles such as consensus builder, question asker, seeker of additional information.	Team members can recognize when they are being productive and proceed, versus when they should rethink the issue if they are not moving forward productively.
The team uses a variety of problem-solving and decision-making strategies.	Team members can discuss differences in opinions openly. Disagreements are respected and considered.
Team members respect the limits the team may have within the broader school.	Team members communicate effectively and continue to develop positive communication skills.

Source: P. H. Ephross & T. V. Vassil, Groups that work: Structure and process, 2nd ed. (New York: Columbia University Press, 2005).

Inclusive education requires a paradigm shift from historic practice on many levels. Building strong multidisciplinary teams who understand that collaboration with each other and with families requires a new mindset and a strong set of communication skills. The skills required as part of this collaboration also serve teachers well in the classroom setting as they work to support all students and especially their students with special education needs. The next portion of this chapter will focus on co-teaching, a way for teachers to collaborate within the classroom to best provide quality inclusive education. The section begins with an activity (*see Box 1 below*) that readers can do to practice effective teamwork.

Box 1. Role Play as Teamwork

Read Michael's story below, then complete the following activities —

- Role play a multidisciplinary team meeting. In groups assign a role to each member. Take on the role you are assigned.
- Practice communication skills that have been identified above. Potential roles: General education teacher, special education teacher, speech therapist, social worker, family member and child.
- The meeting deals with the child's current education plan for the year. Go over results and discuss the plan on how to move forward.

Michael's Story

Michael is a 10-year-old who has moved from his special school to an inclusive school. Michael has been labeled with a cognitive disability and is in the fourth grade. He started in his new school one month ago. The school contacted the family about setting up a multidisciplinary meeting. The family refused to come to the meeting, saying that it was the school's

responsibility to plan for Michael's education. The school decided to send the social worker to the home to talk to the family and explain to them why it was important for them to come to the school to meet with the team. After getting information and talking among themselves, the family began to trust the social worker and agreed to come to the school for the meeting. During the meeting, which included a social worker, psychologist, speech therapist, special pedagogue and general education teacher, the social worker welcomed the family and introduced them to the team. The team members talked about the child informally and then started the meeting.

One purpose of the meeting was to discuss the ILP. In addition, team members noticed that the child frequently refused to interact with the specialists. The social worker started with the following prompt: "Let's all share what we all know about Michael so that we can best support him in his education." Team members, including the parents, shared their thoughts on Michael's strengths and challenges. They were very attentive to the concerns and input of the family, and at the end of the meeting the family expressed their gratitude because at the last school Michael attended, they were not consulted about Michael's educational plan.

The Role of Co-teaching in Inclusive Education

Successful inclusive education requires collaboration on many levels. While multidisciplinary teams are important for creating a sense of ownership and involvement to best meet the needs of the children with disabilities and their families, full inclusion also necessitates collaboration in the classroom. Creating successful learning environments for all students requires a new way of looking at teaching: one which uses the resources of the school most effectively and where children are learning in more engaging environments that best meet a vari-

ety of learning needs. To most effectively teach all children in inclusive classrooms, a practice known as co-teaching is used. Research on co-teaching is still in its early stages, but one study found that students with learning disabilities in co-taught classes showed higher attendance and better grades on report cards than those taught in classrooms with just one teacher (Rea, McLaughlin, & Walther-Thomas, 2002). When research was conducted with students at the high school level, findings showed that students favored co-teaching and would participate in co-taught classes again if given the opportunity (Wilson & Michaels, 2006). Students reported that more help was available, and they experienced multiple teaching styles. The co-teaching practice provides teachers with the necessary support in the teaching process and also provides all students with multiple ways of engaging with teachers. The practice of co-teaching challenges teachers to re-examine their teaching practice and build on each other's strengths.

What Is Co-Teaching in the Schools?

While co-teaching can occur in multiple educational experiences, from university classes to primary and secondary schools, this chapter will focus on co-teaching in the inclusive school. Co-teaching is a partnership between educators (Friend & Cook, 2010) or other specialists in order to instruct students with diverse needs within the general education classroom. It is aligned with inclusive strategies in a number of ways, in that it reduces stigma for students with special needs and improves instruction for all students. Various methods of co-teaching also allow for diverse instructional opportunities for students and more varied and creative teaching methods. While co-teaching is an important part of an inclusive practice, it is not a requirement for inclusion to occur. It is, however, a very effective way to provide services to students, and it shares many benefits

with other inclusive strategies (Friend & Cook, 2004). The intent of co-teaching is to make the general education curriculum accessible to students with special needs (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). This practice also enhances the participation of students with special educational needs as full classroom members, giving them access to the general education curriculum and to teachers who are highly qualified in particular subjects. Co-teaching also provides support to the teachers involved in the co-teaching setting (Friend, 2005).

While co-teaching, two teachers (typically a regular and special educator) share physical space in order to instruct a group of students within an inclusive learning environment. The model combines general education teachers' knowledge of curriculum with the special education teachers' expertise in individualizing instruction. Individualization includes students who are academically gifted because it allows for a variety of teaching delivery strategies.

The co-teaching method provides all students with a wider range of instructional strategies and allows for more participation of students with special education needs than in classrooms taught by just one teacher (Friend & Cook, 2010). The end goal of co-teaching is for students to be more effectively included with their general education peers. It also allows for more varied and creative teaching methods, increases support for teachers and other service specialists by providing shared teaching time, and may more efficiently use the resources of all professionals than separate delivery does. Co-teaching requires professionals to plan and implement instruction (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). In the paragraphs below, six approaches to implementing co-teaching are described.

Ways to Implement Co-Teaching

Co-teaching can be implemented in a number of ways. The key is to understand which of the following best meets the needs of the content being taught and the needs of the students. Teacher resources and time are also key factors in determining which style to use. Based on the six approaches listed below, teachers address the individualized goals and objectives of students with disabilities while also meeting the learning needs of the other students in the class.

One teach, one observe

One benefit to this approach to co-teaching is that both teachers at one point have the opportunity to observe the class and individual students. The main teacher plans the lesson, so it requires little preplanning. One caution with this approach is that if one teacher remains in the main primary teaching role most of the time (often the general education teacher), the result may be that the other begins to be viewed as a teaching assistant, not a professional with equal teaching status.

Station teaching

A 'station' is an activity set up by teachers for students to complete in one part of a classroom. Various stations are set up, and students move through them with one teacher supporting each station. For example, one station may have an activity related to reading and another may have an activity where students write. All of these relate to the lesson, which may be in any subject area. Each station has a different task that relates to the overall objectives of the lesson, and teachers and assistants each provide support at a different station.

Parallel teaching

In this approach, teachers co-plan instruction, but the class is divided into two groups, and each teacher works with one group. This approach reduces student-teacher ratio and works best when conducting test reviews and projects that need more intense teacher support. For example, in preparation for a math test, one group may include students with learning disabilities and the other a student with autism. This allows teachers to mix the groups, and the needs of the students in each group can be diversified.

Alternative teaching

This strategy allows for small groups to be taught based on skills that may need to be developed that are different from the large group. One teacher may take a small group (students with and without special educational needs may populate this group). Alternative teaching allows for in-depth instruction within the inclusive classroom environment. It allows for all students in the classroom to receive some small-group instruction. One consideration with this approach is that often it becomes only the students with special needs who are pulled on a consistent basis, thus creating a segregated setting within the general education classroom.

Team teaching

In team teaching, both teachers deliver the same instruction at the same time, so they ultimately co-instruct with one group of students. Instruction becomes more like a conversation. This approach is considered by some to be the most complex but also the most satisfying.

One teach, one assist

In this strategy, one teacher maintains the role of classroom manager while the other takes primary responsibility for teaching. For example, if math is being taught, one will teach

and the other will monitor students, observing where help might be needed. This allows a teacher to provide individual support to students who may be students with disabilities or others who are struggling with the lesson. This approach can also be problematic, because if planning time is not available, this becomes the approach that is most often used whether or not it is the best for the learning needs of the students (Friend & Cook, 2010).

In deciding which approach to use, it is important to determine the one that is most useful given the teacher resources, the needs of students and content of the subject being taught. Here is an illustration of some of the approaches mentioned above (*see Figure 1*).

Figure 1. Strategies for Co-Teaching
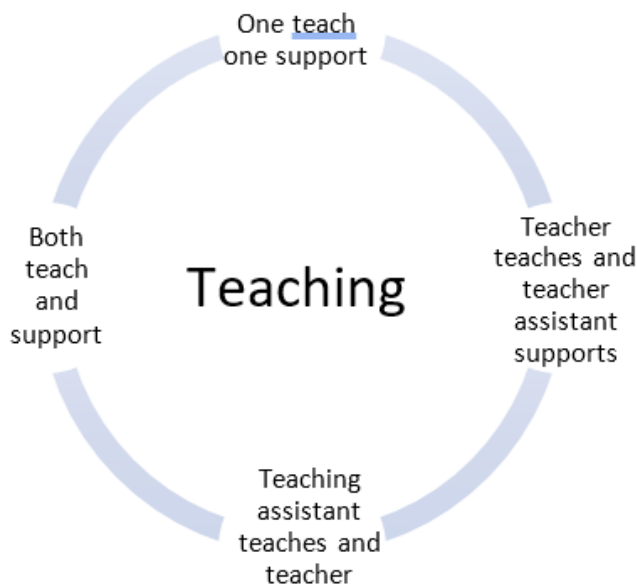
Friend and Cook (2004) also provided some guidelines that help the teams determine which co-teaching strategy to use for particular lessons (*see Box 2 in the next column*). It is important for teams to discuss the content of the lesson and which approach is most suitable for the needs of the students.

Box 2. Considerations for Selecting a Co-Teaching Approach

- **Student characteristics and needs.** An example of this would be if a student has a difficult time transitioning during activities. You would not want to select an approach that has many changes in the lesson.
- **Teacher characteristics and needs.** If co-teachers vary in their teaching styles, it is best to select approaches that allow them to teach independently. If teachers work easily together, a more shared approach might work best.
- **Curriculum, including content and instructional strategies.** Considering the content and which instructional strategy best fits is important. Content that is highly structured, such as teaching steps in a process, may require an approach that is different from content where there is open discussion of ideas.
- **Practical considerations.** If the classroom is crowded, you may want to consider an approach that does not depend on space and spreading out.
- **School readiness.** Another consideration before implementing co-teaching is how ready the team or the school is to begin the process. Some schools may be open to new ideas about co-teaching, while others are more resistant.

Beginning the co-teaching process starts with communication between regular and specialist teachers as well as support from the management of the school. Friend and Cook (2010) have provided guidelines that teachers or schools can reflect on to check for readiness (*see Box 3*). These guidelines may also act as conversation starters for a school as it begins to transition to a co-teaching model.

Box 3. Checklist to Determine Readiness for Co-Teaching

My co-teacher and I have —

___ **1.** Discussed our perceptions of how a classroom is shared, identifying both our similar beliefs and resolving differences in our understanding. For example, in relation to classroom noise, one might believe that a noisy classroom is productive and busy, while the other might believe a noisy classroom interferes with some students' learning.

___ **2.** Reviewed the instructional needs of students with disabilities in the class and agreed on accommodations likely to be needed.

___ **3.** Identified how we will convey to students from the first day of co-teaching that we are partners and have equal classroom authority.

___ **4.** Conferred on day-to-day matters such as expectations for classroom routines and a time to debrief about the co-teaching.

___ **5.** Shared our perceptions of how instruction and classroom duties can be shared.

___ **6.** Addressed what potential strengths and liabilities each member brings to co-teaching.

Who Are Teacher Assistants?

While co-teaching often occurs between the general and special education teachers, teaching assistants may also be important to the team. Teacher assistants provide support for classroom teachers in primary, secondary and preschool education. A teacher assistant is the person who works under a teacher's supervision to give students additional attention and instruction. They may work in public and private schools, childcare centers and for nonprofit organizations. A teacher assistant will typically do the following —

• Reinforce lessons presented by teachers by reviewing material with students one-on-one or in small groups;

• Enforce school and class rules to help teach students appropriate behavior;

• Help teachers with record-keeping, such as tracking attendance and calculating grades;

• Help teachers prepare for lessons by getting materials ready or setting up equipment, such as computers;

• Supervise students in class, between classes, during lunch and recess, and on field trips.

Teacher assistants are also called teacher's aides, instructional helpers, paraprofessionals and para educators. Commonly, teachers introduce new material to students, and teacher assistants help reinforce the lessons by working with individual students or small groups of students. For example, they may help students learn research skills by helping them find information for reports.

Teacher assistants sometimes help teachers by grading tests and checking homework. Teachers may seek feedback from assistants to monitor students' progress. Some teachers and teacher assistants meet regularly to discuss lesson plans and student development. Some teacher assistants work only with students with special education needs. These students attend inclusive schools, and teacher assistants

help them understand the material and adapt the information to their learning style. With students who have more severe disabilities, assistants may work with them in both regular classes and separate classes. Teacher assistants may help these students with basic needs such as feeding or personal hygiene. In the case of young adults, they may help students with special education needs learn skills necessary for them to find a job after graduation. Finally, some teacher assistants work in specific locations in the school. For example, some work in computer laboratories, teaching students how to use computers and helping them use software. Others may work with cafeteria attendants, supervising students during these times of the day.

Although most teacher assistants work in elementary, middle and high schools, others work in preschools and other childcare centers. Often, one or two assistants work with a lead teacher to give the individual attention that young children need. They help with educational activities. They also supervise the children at play and help with feeding and other basic care.

The Role of Teacher Assistants in Armenian Schools

The teacher assistant position in Armenia occurs within the structure of inclusive education in order to provide qualitative service to all learners. The position was created to help address the need for supporting student learning in the inclusive classroom. Within this scope, the teacher assistant's responsibilities and roles in inclusive schools are identified as follows —

- Help teachers to plan and implement teaching and tutoring issues;
- Support realization of ILP;
- Support general teachers to use appropriate methods and techniques in order to provide

sufficient knowledge and understanding regarding the particular subject;
- Conduct class and case assessment and data analysis;
- Support teachers in preparation of teaching materials, including those for children with special educational needs;
- Participate in class preparation activities;
- Along with teachers, justify, assess and observe issues applied to the learning process of the particular child;
- Enable formulation of self-regulation in learners;
- Protect learners' rights and freedom;
- Collaborate with the multidisciplinary team;
- Participate in methodological subject group discussions;
- Contribute to social services case discussion and introduction.

In order to hold the position of teacher assistant, the professional must have a higher pedagogical or higher degree or have at least three years of pedagogical experience within the last 10 years (*Teacher Assistant*, 2017).

To successfully implement co-teaching, it is important that both the teacher and the teaching assistant recognize that they are a team, and both must take responsibility to create a productive co-teaching environment. This practice has been implemented in the United States for well over 10 years, but is a new practice in Armenia. To promote inclusive educational practices, co-teaching has proven to be extremely effective because it allows schools and teachers to maximize the limited resources available. As was mentioned above, co-teaching between the teacher and teaching assistant requires an attitude of shared classroom responsibilities. It shifts from an attitude of 'my' classroom for teachers to one of 'our classroom' for the two professionals who will work together to promote education for children.

Issues to Consider for Implementation

A shift to a co-teaching model requires thoughtful planning and ongoing communication. Co-teaching represents a change in practice, especially for general education teachers, who have typically claimed the classroom as their own. It presents the idea of a shared classroom and shared styles of teaching. Some considerations that teachers should take into account before they begin the process include instructional content and expectations for students; creating time for planning, which should include the strategy that will be used and who will do what; styles of instruction and organization and discipline expectations for the classroom; how to discuss issues that arise and how you will give feedback to each other on approaches to teaching tasks related to aspects of teaching like grading and lesson preparation (Friend & Cook, 2004, 2010).

It is beneficial for teachers to have ongoing dialogue when co-teaching. This includes questions such as —

- How do we create time to plan and share teaching chores such as assignment preparation and grading?
- Do we understand each other's teaching styles?
- How will it be clear that both educators have the same status in the classroom?
- How is space designated that supports students and both teachers?
- How do we each feel about noise and student activity in the classroom?
- What are our instructional and organizational routines?
- How do we provide feedback to each other, including when and how to discuss issues? (Cook, 2004)

When considering implementing co-teaching strategies, Friend and Cook (2003) suggest that administrator(s) be on board and introduce the topic to the school staff. It is important at first that people understand that developing strong co-teaching practice is a process and that not everyone will be co-teaching right away. Second, discussing the role of the teaching assistant in the classroom is important as well. When teachers teach together, the role of the teaching assistant can be confusing. It is important to clearly designate the tasks of each person in the learning environment. Third, since it may be difficult for general educators to share the teaching, suggest a strategy where you might begin the process by co-teaching a unit for several weeks. This will allow for understanding of styles and philosophy and finally, develop a thought process of 'we' versus 'I' and 'team' versus 'my.'

Co-Teaching Example

A young first-grade teacher started the year working with 32 students. Three students had special educational needs, two with behavior challenges and one with a cognitive disability. The teacher was very challenged by the needs in the classroom and talked with the teaching assistant to find better ways to work with the class. Since the teaching assistant was focused on working only with the children with disabilities, they thought that a co-teaching approach would help them to best use their resources and also provide all students with a richer learning experience.

The teacher and teaching assistant decided that they would begin co-teaching in math. The class was working on addition and subtraction, so using the station approach was a good way to begin. The teacher and co-teacher met the week before they were to begin so they were well prepared. They decided that after a short math lesson to the whole group, they would develop two stations. One station would be for students to practice the math problems using manipulatives where they would use cubes to

add and subtract problems. The teaching assistant worked with the students at this station. At the other station, the teacher worked on the workbook and applying the problems.

The first day went well, and they found that the students were more engaged in their math work. The fact that the students were able to move around also helped them focus more. Both the teacher and the teaching assistant felt successful because co-teaching allowed them to both have an active role in the teaching process because they could divide 32 students into smaller groups. The team then decided that they would continue to use other co-teaching techniques because they found students to be more engaged and focused. They also found that when they collaborated in their teaching, they were able to help and support each other, which also benefited their students.

Conclusion

Inclusive schools require intense collaboration in order to meet the educational needs of all students. Some of this collaboration occurs when planning individualized learning programs for students with special education needs. In such planning, teachers, therapeutic professionals, school leaders and parents must join together to find the most effective plan for the child. Open communication and egalitarian principles for group dynamics will help ensure that all team members' voices are heard in the best interest of the student.

In inclusive schools, teachers are no longer expected to be in full charge of the learning in the classroom. An emerging model of co-teaching allows for special teachers or teachers' assistants to work together with teachers to plan lessons effectively. In co-teaching, professionals can work with small groups, co-lead lessons, target support for specific children or move between roles fluidly. Co-teaching allows support for all children to occur within an inclusive classroom by leveraging the strengths of professionals as a team.

Tips for Teachers and Teacher Assistants

- Create a welcoming environment.
- Make sure all voices are heard.
- Create opportunities for families to be active members of the team.
- Include specialists based on child's individual needs.
- Whenever possible, get the support of the school administrator to introduce the concept to the school staff as part of best practices in developing inclusive practices.
- Teachers should clearly communicate the role of each teacher. This might occur during a weekly planning meeting about who is responsible for what during a given lesson.
- When beginning co-teaching, begin small, taking only one unit or subject area to begin so they get a sense of each other's teaching styles and expertise.
- Develop a habit of using 'we' language. Students don't belong with one teacher or the other; think of it as 'our' classroom and the lesson 'we' planned.

Thoughts for Leaders

- Support all multidisciplinary team members based the needs of the team.
- Create a climate where the expectation is clear that all members work together with families to function as a productive team.
- Offer information sessions for families who have children with disabilities, describing the multidisciplinary team process.
- Follow up with the multidisciplinary team to make sure what they determined is implemented.

- Provide time for teachers and teacher assistants to plan and provide activities based on the curriculum.

Reflection Questions

- How might a teacher and teaching assistant find time to plan together for lessons that create the best opportunity for all children to learn?
- How do teachers best use their strengths (e.g., regular teachers' content strengths and teaching assistant's individualization strengths) in a co-teaching environment?

Additional Resources

UNICEF (2014). Teachers, Inclusive, Child-Centred Teaching and Pedagogy, Webinar 12 and Companion Booklet 12. *Series of 14 Webinars and Companion Technical Booklets on Inclusive Education*. Geneva, Switzerland: Author. Retrieved from: Retrieved from https://www.ded4inclusion.com/inclusive-education-resources-free/unicef-inclusive-education-booklets-and-webinars-english-version

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- https://www.hewlett-woodmere.net/cms/lib/NY01000519/Centricity/Domain/29/20120522095107.pdf
- http://people.uncw.edu/rabidouxs/coteach/Co-teaching%20Article.pdf
- https://study.com/articles/difference_between_teacher_teaching_assistant.html

Glossary

Co-leadership — Leadership style that broadly distributes leader responsibility, such that people within a team and organization lead each other.

Community — A group of people living in the same place or having a particular characteristic. It requires a feeling of fellowship with others as a result of sharing common attitudes, interests and goals.

Inclusive strategies — Teaching approaches that address the needs of students with a variety of backgrounds, learning styles and abilities.

Stakeholder — Person or group of people who have common interests or concerns that affect or can be affected by an organization's actions.

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CHAPTER 4:

The Role of Families in Inclusive Education

Susan O'Connor, Augsburg University, Minnesota
Tereza Azatyan, Lilit Karapetyan, & Zhanna Paylozyan
Armenian State Pedagogical University

This chapter explores the importance of inviting families of children with disabilities into the educational process and provides ideas and considerations for creating strong family and professional partnerships in order to enhance inclusive practices.

Before reading this chapter, ask yourself the following —

- When you see a child with special education needs in the community with her or his family, what thoughts do you have about the child and the family?
- What do you think families need in relation to supporting children with special educational needs?
- What do you think families' concerns are in relation to their children and society?
- What is your role in relation to supporting families with children with special education needs?

Introduction

The role that families play in the process of inclusive education is crucial. Families are the first people to know the child and the ones who will be involved in their lives as their children move from primary to middle to high school. Why, then, do they often play a minor role in the education process of their children? Historically, families have been relegated to the sidelines when it comes to working with their child's educational team, mainly taking on the role of recipient of professional knowledge. This has been the case in Armenia where communication between parents and professionals has continued to follow a more traditional hierarchical approach. Parents or families would typically come to meetings and receive test results, listen to the goals that have been set for their child and often receive communication from the school when something is needed from them or when something goes wrong. Shifting the role of families from passive recipients of information to active participants in the planning process is critical when we plan for inclusive education for students with special education needs. Understanding the role of families as advocates and partners with the educational team is a major shift for both families and professionals from past educational practice. The shift is important, though, because families hold a wealth of information and know the child in far more intimate ways than profes-

sionals or what the results of tests and assessments show. Most families understand the growth and the needs of their child, yet largely remain an untapped resource.

In Armenia, the first contact between families, students with special education needs and professionals happens during the process of pedagogical and psychological assessments. Families are members of this team, and the most common means of communication between them is through discussions, consultation, meetings and trainings. However, in inclusive settings, most of the teachers and families lack the required knowledge and skills to establish a strong and more equitable partnership.

Such partnerships, however, are essential for effective inclusive education. Research shows that when families and educators work together as partners, it enhances the likelihood that all children will have positive and successful learning experiences (Ferrel, 2012; Núñez, Suárez, Rosário; Vallejo, Valle, & Epstein, 2015). A comprehensive study conducted by Hoy (2012), who reviewed those characteristics that lead to improved student achievement, found that higher math and reading scores were achieved when teachers developed trust in parents and worked in partnership with them. Another national longitudinal study in the United States looked at secondary school students with disabilities as they related to academic achievement. The study found higher

achievement levels for youth whose families were more involved in their school experience. Positive results included achieving better grades, developing more friendships and being more likely to be successful after they graduate (Newman, 2005). Turnbull et al. (2015) found that family involvement improved skill development and increased motivation and positive behaviors.

Including families in the educational process is both logical and has been demonstrated to produce better outcomes for the students. This chapter discusses the role that families should play in the education process of their children and how schools can move to a family-centered approach that includes the whole family as recipients of support and as partners (Epley et al, 2010). The chapter addresses the cultural and behavioral changes that need to occur in order to be inclusive of families and develop a view of families' role as a resource rather than a roadblock to progress. The chapter also discusses the skills and strategies needed by professionals to include and communicate with families in order to support them to be active participants in the child's school life.

Understanding the Needs of Families

In working with families, it is essential to begin to develop a different type of relationship than relationships experienced by families in the past. Inclusive relationships are characterized by professionals who gain a deep understanding of the needs and perspectives of the families and their children. This approach is often not a part of current practice because it is challenging for professionals to begin to understand how families perceive the school environment and their role within it. One place to begin is for professionals to ask different types of questions in order to develop stronger relationships with families. Professionals who wish to work closely with families can find out —

- What motivates a family?
- What concerns do families have that might deter them from participation?
- How has the school invited the family to the planning process?

These types of questions help provide a deeper understanding of ways that families might be better understood and welcomed into the educational planning process. Additionally, families must accept that their child has special education needs and be willing to work with teachers and other professionals to provide the best support for the child. Changing these behaviors will be a process — one that may be unfamiliar to families and professionals. This new approach will take time and intentionality for both families and professionals.

One tool that can be used by professionals to begin to understand the perceptions that often go unseen when it comes to why parents might be unwilling to participate is what Day (2016) calls a *parent empathy map* (p. 41). This map allows teachers to better understand family perspectives and might ultimately make families feel more understood. The map encourages teachers to reflect on four questions —

1. What do parents think and feel?
2. What do parents see and hear?
3. What are parents saying and doing?
4. What do parents want?

Day provided an example of such a map for teachers to use *(see Table 1 on page 42)*. In Armenia, close family members such as grandparents are key to understanding the family dynamic. This map requires teachers to reflect on the needs of families in a more in-depth way and can be used as a tool to begin to create empathy and solutions that work toward building constructive ongoing relationships.

Table 1. Parent Empathy Map

What do families think and feel?	What do families see and hear?
What are families saying and doing?	What do families want?
What concerns do families have?	What gains are families making?

Family-Centered Approach

As mentioned above, families are involved with their child across the lifespan. Developing strong relationships early in the child's school experience will help the child and the relationship between families and schools and will also help families to develop skills to work with professionals as their children mature. These partnerships require a family-centered approach to partnering with families, which is not limited to parents. Family-centered partnerships should involve other family members, such as grandparents, siblings and even family friends (Turnbull et al., 2015). In this chapter, the word *family* will indicate the broader network.

The inclusion of families in planning processes requires that professionals have strong partnership skills. Basic to any partnership is a focus on the strengths, expertise and resources that each partner brings. Seven behaviors that are key to developing these relationships, according to Turnbull, Turnbull, Erwin, Sooda, and Shogren (2011), are communication, respect, professional competence, equality, commitment and trust. Blue-Banning, Summers, Frankland, Lord Nelson, and Begle (2004) also add confidentiality — the need for families to know that what they say will be kept within

the team working with the family. The following chart (*see Table 2 on page 43*) defines these key behaviors and provides examples of how professionals might take action when it comes to implementing these behaviors and how each can lead to developing trust or cause families to distrust the process.

Table 2. Creating Partnership Through Trust Building

Partnership Principles and Practices	Issues	Actions Leading to Distrust	Actions Leading to Trust
Communication. The verbal, nonverbal or written messages that partners exchange among themselves. Indicators include — • Being friendly • Listening • Being clear • Being honest • Providing and coordinating information.	You are participating in a conference with parents of the child with special educational needs who are extremely angry that their child is making poor grades and believe that it is their fault.	Tell the family during the meeting that they have not provided proper supervision for homework and that the poor grades are their fault.	Listen empathetically and ask if they would be willing to brainstorm options that would involve them and you collaborating to promote their child's program.
Respect. Relationships in which each partner regards all others with esteem. Communicate care for family through actions and words. Indicators include — • Honoring family's background • Affirming strengths • Treating students and families with dignity.	The school develops a guidebook on inclusion and holds a meeting to discuss it with families and the community.	Tell the family that maybe their child or some friends can translate or explain parts of the handbook to them.	Talk with your administrator about getting the handbook translated into Russian or finding someone to explain it to the families.
Professional competence. • Set high expectations. • Provide a quality education. • Continue to learn.	Family of a student who is failing every subject are not showing any concern about school failure.	Tell the family that you object to their family priorities and that they are only hurting their son.	Meet with the family and find out, from their perspective, their priorities for their son, both this year and in the future.
Equality. Each partner has roughly equal opportunity and talent to influence the decisions that the partners make. Indicators include — • Sharing power so families are consulted on decisions related to the child's goals and program • Fostering empowerment where the family is listened to and encouraged to speak up even if the team does not agree • Providing options.	A family member asks if a conference can be arranged before school to accommodate her work schedule.	Tell the family it is against school policy to meet during the school day.	Ask the family if it would be possible to talk on the telephone early in the school day rather than meet at school.

Partnership Principles and Practices	Issues	Actions Leading to Distrust	Actions Leading to Trust
Commitment. Be sensitive to emotional needs of the family. Do they experience challenges at home that teachers are not aware of? Indicators include — • Being available to the family for consultation • Going above and beyond what is expected • Being sensitive to families' emotional needs.	The family has just moved to a new community, and neither the student nor the family know anyone at the child's new middle school.	Assume that the family may be interested in coming to the school open house next year; leave them on their own to make connections in the new community and school.	Call the family; issue a special invitation to come to a school event or a field trip and arrange with another family to meet the new family and student and introduce them to others.
Trust. Maintain confidentiality. Having confidence in another person's word, judgment and action and believing that the trusted person will act in the best interest of the person. Indicators include — • Being reliable • Maintaining confidentiality • Trusting yourself.	The school administration asks parents to contribute to a fund to pay for the classroom activity, but the parents do not have money to contribute.	Tell them they'll not be able to take part in the activity, since they have to 'pay their own way.'	Identify a nonmonetary way for them to contribute to the class; tell them their classroom contribution represents their contribution; keep everything confidential.

Source: Turnbull, Turnbull, Erwin, Shodak & Shogren (2015).

Communication with Families

As mentioned in the previous section, communication between teachers and families is a critical aspect of the educational process, especially as it relates to inclusion. It is important to recognize that this is a new way of interacting for both families and professionals who are more familiar with hierarchical roles where professionals are considered to be the experts and parents accept that expertise with few questions asked. Shifting such a focus required new attitudes and new skills. Communication plays an important role in this shift. It means more than simply conveying information, it requires establishing strong relationships with families and opportunities for them to become effective members of the team.

Effective communication involves conveying information in ways that families can understand. Often the message families receive when they attend meetings is that they are merely there to receive information. When parents are talked to (rather than communicated with), information often comes in the form of assessment results and program goals that are shared using technical language they may not understand. Use of such terminology communicates a strong message to families that they are not part of the team but there only to be told about their child. In addition, families are often surrounded by a large group of professionals, which creates an atmosphere of 'them vs. us,' sending a message to families that their voice is not valued.

Likewise, there is often resistance from families to participation as a member of the team. They may not know how to enter the process, or they may feel that planning is the work of professionals. Developing strong family-school bonds that invite parents to see themselves as equal and important members of the team is essential, and communication is a key element in this process.

Developing strong communication skills involves active and empathetic listening as professionals attempt to understand the perspectives of the family. Families often feel looked down upon if they have not been engaged in the process or do not understand the information that is shared with them. It is important for the team to try to understand the family's challenges without judgment, so that when communicating with the family, the professional understands that the family may be feeling overwhelmed and may not have the capacity to communicate. Only after developing an understanding of the family and communicating with them over time can these deeper relationships occur. Parents and professionals often have different ideas about what communication means. This is highlighted in the following quotes from a family member and a professional (*see Table 3 below*). They provide insights into how parents and professionals may view the same conversation differently.

Table 3. Different Perspectives on Communication

Parent Perspective	Professional Perspective
The first thing is to listen to us ... because we know our kids better than anyone ... so if I tried to say, to tell them (professional) something, it'd be LISTEN TO ME.	I talk a lot ... I give them so much information ... They are really grateful about that because no one else really gives them that much information ... They trust me now ... I build a lot of relationships through a lot of talking and giving them information and that's important to them.

Source: Blue-Banning et al., 2004, p. 175

What families and professionals view as communication can vary greatly. The parent in Table 3 wants to be heard and valued, and

the professional believes she is doing just that. By sharing all the information she can, this professional believes that her communication with the family is successful. She assumes that she knows what the family needs from her. This barrier to communication can be bridged only by building effective communication that requires listening and reflection on why things might not be working — often, deeper understanding of not only what is being shared, but more importantly, what is *not* being shared. It is something that occurs on many levels and begins by developing a relationship where the parent and professional(s) work together. We highlight how, with a few small changes, more effective communication builds a stronger relationship (*see Table 4 below*).

Table 4. Stronger Relationship Perspectives

Parent Perspective	Professional Perspective
I was worried that my child was always causing problems in class, so I went in and talked to his teacher, and she sat down with me for as long as I needed and explained some things I might try at home.	I noticed that I stop myself more now when I am talking with families to listen to what they have to say before I start talking. Since doing that, I notice that families are more willing to share their ideas, and our collaboration is stronger.

One important way to develop a working relationship with families is to consider how communication occurs on a daily, weekly or monthly basis. Building such a relationship helps to allow for effective communication when it comes to ILP or other critical meetings that will take place. The following section will discuss some ways in which teachers might begin to build strong connections to parents as they work to create inclusive classrooms.

Building ongoing communication

Often, teachers think that family members should come in to school only when receiving information on the ILP or to discuss another issue about the child. Such a perspective is problematic. In such a model, once parents listen to the information and plan for their child, they sign off, and communication has been complete. Building rapport and strong relationships requires different types of communication and a way of communicating that occurs over time. Families appreciate frequent communication. Letting them know how their child is doing on an ongoing basis is essential to developing a relationship.

Some teachers provide family members with daily communication. This might be in the form of a phone call, online communication (for example, via Dasaran.am) if families have access, or in the form of initiating a notebook in which the teacher writes a few comments about how the day went if there are specific things he or she feels the family needs to know. This is also an opportunity for family members to write back to the teacher, perhaps providing the teacher with essential information regarding stressors or behaviors that might affect the child's school day. For example, perhaps the child did not sleep well the night before because there was an unsettling situation in the family. Or, there may have been a disagreement at school between two students that upset the child. This type of exchange can develop an ongoing way to communicate the accomplishments and needs of the child for both the family and the teacher. Because it occurs on a frequent basis, it allows for families to hear from teachers, not only when there is a problem, but also when there are successes, or simply to say their child had an okay day. When they hear only the problems from school, parents might begin to distance themselves from the teacher, and communication breaks down. Allowing for more frequent communication

provides more opportunities for families and professionals to connect.

Communication at more formal meetings

As was mentioned above, parents frequently attend meetings and are told about their child without the opportunity to add their perspectives. Shifting this one-way communication dynamic begins with looking at how the meeting is constructed and how parents are invited to participate. Inviting families to participate in a meeting is different from inviting them to attend. Initially parents may choose to have a more limited role because they are accustomed to remaining quiet in meetings, but some parents will welcome more involvement immediately. It is important to remember that providing opportunities to participate is critical to shifting the communication paradigm. There are a number of tips to remember when inviting parents to be involved in meetings —

1. Create a welcoming environment; parents often feel as though it is them versus the professionals. Create an environment that is hospitable and engaging;

2. Make sure parent contributions are valued. Parents do not want to feel they are blamed for things that have occurred;

3. Maintain confidentiality;

4. Share information in a way that all members understand instead of using jargon understood only by professionals;

5. Use active listening skills. Establishing empathy and listening without judging is critical in establishing trust.

How teachers interact with families at these meetings will strongly influence their involvement in the school process and their child's education. The climate that is created on a daily basis as well as at more formal meetings affects not only the degree of family involvement but also the success of the child.

Developing Interpersonal Communication Skills

Nonverbal and verbal skills are necessary when communicating in a positive way with families. Developing or refining such skills takes self-awareness and practice. Nonverbal communication skill such as facial expression, gestures and physical proximity are often unconscious activities, but all convey powerful messages. Some examples of nonverbal communication are listed below. It is important to read nonverbal communication cues, which show in the form of —

- Physical attending. Activities such as making eye contact, warm facial expressions and physical proximity will create engagement, while leaning away or sitting with crossed legs or arms might show being closed to the information;

- Listening. There are many ways to listen. Evaluate whether or not you are paying attention to the parent or merely pretending to be listening. Teachers might ask themselves: Are you listening attentively to all that is being said or just selective parts? Are you actively listening, meaning you make comments and repeat what is being said to check for understanding? Are you listening empathetically, trying to understand where that parent or family member is coming from, trying to understand their perspective?

Verbal communication is another important aspect of the communication process. We present some important skills to keep in mind (*see Table 5 on page 48*).

Table 5. Verbal Communication Strategies

Paraphrasing	In your own words, restate the message in language similar as possible to what was used to clarify content. You might begin with, "Let me see if I am understanding what you are asking," followed by the message.
Furthering response	This demonstrates attentive listening. There are two types: encouraging, which includes responses such as "Oh? Then . . ." or "I see. Then. . ." and the second type, verbal following, which involves restating the main points using the words of the family. This encourages the family member to go on speaking.
Responding to affect	Paying attention to not only what the person says but to how they say it. You are trying to verbalize their feelings and attitudes. For example, "Helen, it seems you are feeling upset with your mom, who you thought was going to help you."
Questioning	Open-ended questions invite the family to share — questions such as "What seems to be working well for Michael now?" Keep the use of closed-ended questions to a minimum. Things that require more a yes and no or just a direct response such as "How long has Ann been at this school?" orDo you feel comfortable today?" can be answered without much elaboration.
Summarizing	Restating what was said with an emphasis on the most important thoughts. Summaries are longer than paraphrasing. A summary might begin with, "Let's review what we have discussed about the math program for George."

Source: Turnbull, Turnbull, Erwin, Soodak, & Shogren (2011)

Moving from Participation to Empowerment

There are many ways to think about how to involve families and many skills that need to be developed. Having parents participate at all is sometimes a major accomplishment that begins to shift communication toward more inclusive family–professional relationships. It is important to take into account that all family members are encouraged to participate. Participants include both parents and extended family members. When discussing this shift, terms such as *participation* and *involvement* are frequently used. While both are important, moving a step beyond mere participation — toward empowerment — provides a new framework that recognizes that families have within them the ability to act and take charge of their child's education as an equal member of the team. People who feel empowered take action to get what they want and need (Trainor,

2012). Often, families have not experienced a sense of empowerment in their relationship with schools and have felt disempowered and disengaged from the process. Part of creating strong, empowering partnerships requires that professionals create opportunities for families to develop and practice taking active roles in the team process.

Moving from a model of participation and involvement to empowerment requires a more in-depth level of communication and collaboration. Participation then requires some form of commitment, where becoming involved requires more action. One framework (*see Table 6 on page 49*) to help understand this shift is provided by Day. This chart provides some examples of how school personnel might support movement toward empowerment. It helps professionals to identify progress on three different levels: participation, involvement and

empowerment. In the first phase, *participation*, the main goal is to help and support parents with the reality of the child being part of the inclusive school setting and the parents' role in their child's education. The next, *involvement*, assumes the presence of parents during school events and, from time to time, visits to the classroom to get to know various pedagogical tools that can be used at home to assist their child. The *empowerment* phase develops when parents and teachers begin to collaborate and see each other as partners in the child's learning. Empowerment requires a high level of collaboration and enriches the family, the teacher and other members of the classroom team. Empowerment also provides an opportunity for families to develop creative approaches to support their child. Using this framework, we provide an example (*see Table 6 below*) of each of the phases. Schools might use this format to create their own path toward empowerment. The process takes time and intentionality, but when families are empowered, they become more fully engaged members of the team and the school community that seeks to provide the best inclusive education for the child.

Table 6. Moving Toward an Empowerment Model

Participation Families attend meetings that are teacher led	Involvement Family and teacher co-lead meeting	Empowerment Family (and student) lead ILP meeting
Families receive and review teacher communication.	Family shares and acts upon information with children.	Families have two-way communication with schools, advocating for needs and receiving responses.
Families are given an ILP to sign.	Families participate in meetings but on a limited basis (passive participation).	Family actively participates: providing input into goals, bringing questions to meetings and eventually helping to co-facilitate meetings.
Subject specific: Families are informed about reading curriculum/goals.	Family observes the teacher work with child.	Family discusses with the teacher how these goals might be reinforced at home.

Source: C. G. Day (2016).

Use the chart below to create your own examples.

Moving Toward an Empowerment Model

Participation	Involvement	Empowerment

An Example of Communication: David's Story

David is 11 years old and is just beginning middle school. In his primary school, he liked his teachers because they understood his strengths and challenges and knew how to work and communicate with him. Now he has new teachers and more is demanded of him. He is acting out and aggressive in school; he is angry when he gets home and won't do his homework. His parents are very concerned about the change in David's behavior. They call the school and are very upset and angry, demanding to know what is happening at school. The classroom teacher speaks to the principal, where it is decided to organize a meeting between David's team and his family.

When the family comes to the meeting, they are still very upset. They come in saying that the new teacher is a problem and does not know how to work with David. They say they want to change teachers and are also concerned that the school does not know how to support their son's increasing behavioral outbursts. They share that his previous teachers knew how to work with him and that they were very effective: "He learned at his last school, but here he does not pay attention and gets into fights. What is wrong?" David's father wonders why things have changed. The teacher and school leader invite the family to sit down and begin by telling them that they want to listen to their concerns.

After listening and asking questions, the school team asks if the parents and school team would like to have a meeting with the previous teachers. The family is excited about this, believing it will help the new teachers understand how the previous teacher worked with David. They also decide that it is important to involve David in this meeting with his family, his current classroom teacher and his previous classroom teacher.

The previous teacher shares that she involved the parents and David in the daily routines and expectations. The new teacher and David's parents decide to share journal correspondence on a weekly basis. The school team asks the family if they have suggestions for what they want to do. Together they decide they would invite all the teachers who knew David in his new school. They also decide that they will keep an ongoing communication diary. The team also decides that they will meet every week to begin with to monitor David's progress. The school leaders also offer to have any family members come into the classroom to visit. Before leaving, the parents thank the teachers for listening.

The school team hopes that by establishing a relationship with this family, in the future they will be involved on school committees and bring their ideas to developing an inclusive school setting where families' voices are heard and where they feel they participate and are empowered.

Summary

This chapter provided professionals with a challenge to begin to bring families into the educational process. In order to develop inclusive educational practices, family involvement is essential. Professionals must examine the ways in which they work with families and develop new practices that shift the communication paradigm from one in which professionals are the absolute experts to a model in which shared expertise is valued and all members are viewed as having important roles and information.

This chapter described communication skills and ways to develop relationships with families. It provided a challenge to move toward a family-centered approach that empowers families to be active players in providing inclusive school experiences that prepare the child to be a full participant in school and society.

Tips for Teachers

- Develop rapport and ongoing relationships with families.
- Ask for family input before and during meetings.
- Create a welcoming environment when families attend meetings.
- Practice good communication skills.
- Communicate on a daily or weekly basis.
- Share the positives about a student's development as well as the challenges.
- Include families in classroom communities.
- Thoughts for Leaders
- Involve families in school events.
- Include families with special education needs in school-parent committees.
- Treat family members as equal members of the team.
- Organize clubs within the school to share knowledge about educational and pedagogical issues.

Reflection Questions

- How welcoming and connected are you with families and students?
- How open and ready are families to collaborate?
- Are you effectively communicating with families?
- Are families seen and treated as equal partners in decision-making?
- Is there meaningful engagement of families in all aspects of their child's learning?
- Is your school moving toward an empowerment model? If yes, how?

Additional Resources

PACER Center. This is an organization providing assistance to individual families, workshops, materials for parents and professionals, and leadership in securing a free and appropriate public education for all children. PACER's work affects and encourages families in Minnesota and across the nation. http://www.pacer.org/

Source Foundation — Supporting Children with Disabilities. A parent-founded association supporting families and children with disabilities. The goal of this program is to better the life and health conditions of children with disabilities, as well as support the process of protecting the rights of their families. https://www.facebook.com/SourceFoundation.am/

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Glossary

Educational team — A group of professionals that might include teachers who work with the child with special needs, speech therapists, and possibly psychologists.

Empowerment model (includes phases) — A high level of collaboration between the family and the school team, in which family members and teachers see each other as equal partners in the child's learning. Empowerment includes phases: The first is participation, and the next is involvement.

Family-centered approach — Skills and strategies used by professionals to include families in the education process of their child and to communicate with family members as recipients of support and as active participants in the child's school life.

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CHAPTER 5:

Assessment in the Context of Inclusive Education: The Need for an Instructional Approach

Renáta Tichá, University of Minnesota
Araksia Svajyan, Armenian State Pedagogical University
Vergine Yesayan, Principal of Special School, Yerevan

Formative assessment plays an important role in monitoring instructional inclusion of children with disabilities. Assessment data form the basis for making decisions about the child's individualized educational programming.

Before reading this chapter, ask yourself the following —
- What type of assessments do you have available to evaluate your students' progress?
- Who is responsible for the assessment of a child's learning needs?
- Should a parent be involved in the assessment process?
- Is it important to involve the child in the assessment process beyond the role of a test-taker?

Introduction

In the Republic of Armenia, assessment for children with disabilities has recently been given special attention under the multi-tiered reform to make assessments more relevant and useful to teachers in inclusive schools and preschools, and in classrooms. A new assessment system has been developed and is currently being implemented in different regions of Armenia. The impetuses for the reform have been the International Classification of Functioning, Disability and Health for Children and Youth (ICF–CY; WHO, 2007) and the United Nations Convention on the Rights of Persons with Disabilities (CRPD) that Armenia ratified in 2010. Prior to 2013, assessment of children with disabilities was based on a traditional medical model and used a categorical approach to diagnosis. The assessment process was the responsibility of the Medical-Psychological-Pedagogical Assessment Centre (MPPC), now Pedagogical-Psychological Support Centre (PPC) in Yerevan, which resulted in the categorization of children with disabilities into the following disability types: speech impairments, hearing impairments, sight impairments, mental underdevelopment, impairments of movement system, psychological development problems, and behavior and emotional impairments (Castro & Palikara, 2017; Hunt, 2009).

This diagnostic approach to assessment was not sufficient to help teachers in mainstream and inclusive classrooms in designing meaningful individualized learning plans (ILPs) with appropriate instructional accommodations and modifications. The diagnostic labels and condition descriptions did not provide any guidelines or suggestions to teachers for adapting learning environments and adopting alternative instructional approaches based on the children's specific needs. In addition, the assessments were conducted in the MPPC, and teachers were not included in the assessment process.

To address the shortcomings of the existing assessment process, UNICEF established a collaborative partnership between international consultants and the local team of experts from the PPC in 2013. The consultants from the Porto Polytechnic Institute in Portugal had expertise in inclusive education principles and practice, in the evaluation of special education policies, and in the use of the ICF–CY. The Armenian PPC experts had backgrounds in psychology and social work. The collaboration included representatives from other key entities in education and inclusion in Armenia, i.e., Bridge of Hope, the Ministry of Education and Science, the Pedagogical and Yerevan State Universities, and the National Institute of Education (Sanches-Ferreira et al., n.d.).

In the effort to revise and improve the assessment system for children with disabilities in Armenia, in 2013 and 2014 a transfer to a biopsychological model was made through an alignment of assessment tools and methodology with ICF–CY. In 2014, amendments to the Law on General Education were endorsed. The Law aims to align the goal of education in the Republic of Armenia with CRPD requirements and to "ensure inclusive and equitable quality education and promote lifelong learning oppor-

tunities for all." After signing CRPD, an action plan was developed to implement the main requirement of making the education system inclusive by 2025. This process is underway and includes, among other components, the reform of special schools into psychological-pedagogical support centers (PPCs), training of teachers and school administrators to introduce IE principles into their practice as well as establishing regional PPCs with multidisciplinary teams to conduct special needs assessments and supporting teachers in the development of ILPs and resources for specialist support to children with disabilities (A. Poghosyan, personal communication, 17 October 2017). One of the key overarching principles of the reform has been to make all activities, including assessments, more child centered.

New Three-Stage Assessment System

The new Armenian assessment system has three levels —

1. Level 1 is conducted by teachers in schools. If there is a multidisciplinary team at the school that includes such professionals as a psychologist, speech therapist, and special educator, the team members can also assist the teacher. Teachers use observations, and a review with a child, parent and other professionals is conducted after assessment data is analyzed by teachers. The Functional Assessment Measure (FAM; Wright, 2000), based on the ICF with rehabilitation focus, is recommended as a tool to be used during the observations and reviews to assess the child's functioning. The FAM describes the behavior of the child, alone or with the help of someone, in various fields of activity. At this level, the types of learning problem(s) within the classroom setting are identified. At Level 1, mild learning and behavior problems of a child are typically the focus. As a result of Level 1 assessment, teachers

develop an intervention plan with the assistance of a multidisciplinary team, where available. The plan includes a development strategy, short-term steps, responsibilities and time frames designed to mediate the problem.

2. If the problem is more complicated and the child has more severe learning needs, the child's support plan is guided by a Level 2 assessment that is implemented by the regional psychological-pedagogical support center (PPC). The multidisciplinary team of the center together with the teacher carries out a comprehensive assessment of the child's development from medical, social-psychological and pedagogical perspectives based on the ICF. This comprehensive assessment can include a multitude of assessment tools, including a questionnaire on the health history of the child, a questionnaire on the social history of the child and the family, an 'everything about me' questionnaire and the diagnostic package for assessing the student's mental development (Papoyan, Galstyan, & Bejanyan, 2009). This includes CARS - Childhood Autism Rating Scale (Schopler & Reichler, 1971, 1980); TPBA - Transdisciplinary Play-Based Assessment (Linder, 1993); COSA - Child Occupational Self-Assessment (Kramer et al., 2014); SFA - School Function Assessment (Coster et al., 1998); SIS - Support Intensity Scale (Thompson, 2004); CFFS - Child and Family Follow-up Survey (Bedell, 2004) and Arc's Self-Determination Scale (Wehmeyer, 1995). All tools mentioned in this chapter have been adopted and localized by specialists from the Medical-Psychological-Pedagogical Assessment Center, (today known as the Republic Assessment Center), experts from Yerevan State University and also as part of a collaboration between Porto University in Portugal and UNICEF Armenia.

The parent is a mandatory participant in the assessment at this level. Multidisciplinary teams connect the results of the assessment to the education standards and discuss a suggested new approach with the teacher. Usually, the specialists will implement the proposed intervention.

The assessment used at this level usually recognizes the student as having a disability and evaluates his or her function. The multidisciplinary team develops an individual learning plan (ILP) for the student, but it is not the role of the assessment center to monitor the quality of inclusive education. There is an ongoing training for the new regional assessment centers taking place by region. It is the center's responsibility to train multidisciplinary teams and teachers in schools.

3. Level 3 assessment is conducted by the Republic Assessment Center in Yerevan that coordinates the work of the regional PPCs. It conducts assessments of students with more severe disabilities and for controversial or more complicated cases. Assessment process and tools are the same as in regional assessment centers. The Republic Assessment Center is also responsible for developing general assessment processes and policies and for providing trainings to the PPCs.

This new system of assessment has already been implemented in the Syunik (2016), Tavush (2017) and Lori (2017), and Armavir (2018) regions. Yerevan is the next implementation region, followed by other regions in sequence, to be completed by 2025. It is an ongoing initiative to assure that there is a data-based process to include students with disabilities in regular instruction. Based on the results from the pilot regions, the system of assessment will be refined.

The paragraphs below (see *Box 1 in the next column*) provide a case study of Student A.A.

This student underwent the typical assessment process in Armenia. The results (in the form of a report) are provided below as an indicator of the information that parents, teachers and assessment centers use to make educational planning decisions. The first section of the report provides demographic information on A.A., followed by a narrative description of current functioning. Following this description, assessment data are provided.

Box 1. The Case of A.A.

Description of Functionality: Level 2
Name, Middle Name, Surname: A. A.
Date of Birth (day, month, year):
04.07.2007**Birth Certificate:** N
Registration: N
Name of the Educational Institution:
Grade: IV
Narrative: A. is 9 years old and in the fourth grade. The child has difficulties in several areas, such as studying and applying her knowledge, performing general requirements and tasks, demonstrating communication skills, interpersonal communication and relationship and integrating into public and social life.

The child is educated through an individualized learning plan. She lives with her father, mother, sister and brother.

The child can express her feelings by several vague voice tones. Her speech is almost unintelligible; she uses only four or five unclear words.

The child has difficulty concentrating. Her attention is not stable; she can focus for one or two minutes and only if prompted by an adult.

She understands oral speech, but is not able to respond immediately. When she responds, she uses gestures. A. likes listening to music, she responds to her name, and she knows the specialists who work with her.

The child is mostly attached to her mother; family relations are satisfactory. The child has

difficulties in relationships with adults and peers as well as while integrating into group work.

The child often expresses negative emotions while trying to achieve a goal. She needs continuous and full support of adults to be able to control her emotions.

If A. needs to adjust to changes, she can do it only with her mother's support, but very often her behavior is impossible to manage.

The child knows household items and knows three colors; red, green and blue. She can put geometric items into the corresponding shapes.

A. learns new items by seeing and touching them. Her visual and audible response corresponds to her age.

The child can use the toilet and wash her hands, brush her teeth and take a bath with her mother's support. She eats and uses table items by herself. She spends most of the time at home with her mother. The child likes to use a computer, play with soil and cut paper.

A. follows safety rules only after the adults' reminder.

The child walks and moves by herself, but sometimes she uses repetitive and irregular movements.

She gets services of a psychologist, a special educator, a speech therapist and a social educator. There is a need to continue the services.

In a 'real' report, actual assessment data would have also been provided to parents. This data would have included scores attained on various assessment instruments and the meaning of those scores. Data are used to understand how A. is functioning in comparison to other youths her age and what might be target points for interventions. In this assessment, the teacher used the following tools —

- The social story of the child and the family;
- The story of the health of the student;
- The assessment package of the student's emotional development;
- The assessment scale of the psychological development;
- The development and education standards of children from 0 to 6.

Once data were collected from all participants in the team, A.'s support network signed the form, agreeing that the process was conducted using available data and that results are understood by all. The forms documenting this approval look similar to the one on the next page *(Figure 1 on page 58).*

Figure 1. Sample Approval Document

Assessed by —

Parent	_____	
Social educator	_____	
Assessment focal point	_____	
Assessment focal point	_____	
Doctor	_____	
Director	_____	
Seal		

Benefits of Current Assessment System and Areas for Improvement

The new assessment system developed in 2014, based on a collaboration between the Porto Polytechnic Institute in Portugal and Armenian education institutions and other organizations, e.g., Bridge of Hope, has made some important advances, not only in the way children are assessed, but also in the approach to identifying the child's needs and potential for successful learning. Adapting the assessment system based on the ICF has shifted the focus from a medical perspective historically used in Armenia and other post-Soviet countries to identifying environmental and personal factors of the child related to body functions and structures as well as activity and participation (Imrie, 2004; Simeonsson, 2009). It is an important step in the right direction that provides teachers and parents with an understanding of some of the barriers that likely prevent the child from effectively participating in his or her environment, including activities in school and in the community.

There is, however, an important missing component of the ICF approach to assessment, i.e., its lack of connection to the local education curriculum and instruction. Sanches-Ferreira, in her presentation at the Towards the Implementation of the UN Convention on the Rights of Persons with Disabilities conference in Yerevan in 2016, noted that there is a difficulty with the ICF–CY in relating the functioning profile with an intervention, or in other words, to the ILP. This is a problem in that the assessment should provide a teacher with practical guidance on how best to adapt or modify materials and instruction to meet the child's learning needs. Simply identifying the deficits of the child (physical, intellectual or emotional) or in the environment is not sufficient to provide struggling students and students with disabilities with true learning opportunities comparable to those of their peers.

For example, in a third-grade class studying a unit on fractions in math, there are two students with disabilities. Student A has a profound vision loss, while Student B has a moderate intellectual disability. What is needed is for the teacher to know how to adapt her teaching materials in order for both students to understand the concept of fractions. For Student A, in addition to explaining the concept orally, the teacher would also provide manipulatives for the student to be able to physically feel how different parts make a whole. This approach will also benefit Student B, but in addition this student will need multiple trials to correctly assemble a circle into a whole from differently sized parts. Instructional methodology or targeted (in some cases, special) pedagogy can be improved and become more effective with the use of formative assessments. Without adding an instructional component to the assessment process, students with disabilities will not be given the full opportunity to be included in learning along with their peers in ways that are most effective.

Alternative Approaches to Assessment

There are two main types of assessments in education: summative and formative. They are designed for different purposes and should not be used in a way other than that for which they were originally intended. *Summative assessment* typically occurs after instruction and reflects a summary of student performance. It is usually done at a single point (e.g., end of semester or school year). These assessments are typically standardized and normed on a representative student sample. Student performance is measured against a standard or a benchmark. Summative assessment can be considered an assessment of *learning* and includes different types of achievement tests. *Formative assessment*, in contrast, occurs as part of instruction and reflects ongoing stu-

dent progress. It is characterized by frequent measurements (e.g., weekly, monthly) and brief durations: one to five minutes. Formative assessment provides information about student learning and instructional effectiveness and is designed to assist teachers in evaluating and modifying their instruction to improve student outcomes. In short, formative assessment is an assessment *for learning*. Formative assessment is typically very localized, i.e., based on the school's curriculum and standardized, but not necessarily normed, as it does not strive to compare groups of students to one another. It is designed to monitor the learning progress of students who are lagging behind their peers or require other special attention. Formative assessments include portfolios and curriculum-based and general outcomes measures.

Curriculum-Based Measurement (CBM)

Curriculum-based measurement (CBM) is a type of formative assessment developed to measure student growth in basic skills, i.e., literacy and numeracy, developed at the University of Minnesota Institute for Research on Learning Disabilities in the late 1970s and early 1980s (Deno, 1985; 1992). This assessment was originally developed to help teachers in regular education to design effective instruction for students with specific learning disabilities[5] (LD). Researchers at the University of Minnesota, with the help of collaborating teachers, designed CBM to be administered to students frequently (weekly or biweekly) to monitor small changes in student reading and later also in math performance. Today, CBM is a key assessment tool used for all students within the Response to Intervention (RTI) framework for

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5 In Armenia, *specific educational disorder* is a diagnosis that used to be one of the categories in the medical assessment model. The term *learning difficulty* is used with the new functional assessment approach.

screening and tracking their progress (refer to Chapter 6).

CBM methodology was adapted from observational approaches to assessment used to monitor changes in student behavior. The advantages of using an observational and behaviorally based approach to assessment are that the assessment (a) captures student's performance in real time rather than having to make inferences about student learning and (b) can be administered for only short periods of time by taking frequent samples of behavior. Another important characteristic of CBM is that it is directly tied to the national or local curriculum and thus has instructional relevance.

Each CBM assessment takes only 1–3 minutes and is easy to administer and to score, with the goal to complement, rather than to disrupt, instruction. CBMs are inexpensive to prepare and administer because materials for their development are based on the local curriculum. The items are sampled from the full sequence of a curriculum (e.g., over an academic year) versus from a single unit within the curriculum to be able to evaluate whether the students are learning the curriculum materials consistently across time and not forgetting what they have learned earlier.

The assessment procedures have been tested for many years with students at different ages, grade levels and type of disabilities (Wayman et al., 2007). Research has shown that CBM is able to produce consistent results across time for individual students and able to measure three key aspects of reading: decoding, fluency and comprehension (Wayman et al., 2007). There are two main types of CBM reading measures: (a) oral reading fluency administered for one minute individually; and (b) maze administered for three minutes to a group of students, in which the students select the correct word out of three choices that best fits into a sentence as they read the passage silently. Both measures are scored for the

number of correct words read or selected. We provide an overview of a CBM Maze (*see Box 2 below*).

Box 2. CBM Maze Example

Eddie Learns to Swim

Eddie sat on his front porch, sweating in the summer heat. Overhead the sun beamed down with in / a / it bright, yellow light. The grass and trees / funny / crash looked withered and dusty in the stammered / students / scorching summer light. Eddie sighed for the flower / clips / tenth time and waved a fly away from / sock / tile his face. "Summer is great because cut / you / mind are out of school," he thought, "but / fit / on summer isn't so much fun when it / for / at is as hot and dusty as even / today / rules."

Scored for number of correct selections or correct minus incorrect selections.

CBM in *math* was developed to measure mathematical computation and concepts and applications (Foegen, Jiban, & Deno, 2007; Fuchs & Fuchs, 2005). These assessments are administered in a group silently for three minutes and scored for the number of correct digits or problems. Similar to reading, in math the problems are sampled from the whole grade-level curriculum to monitor student progress.

In *written expression*, McMaster and Campbell (2008) summarized the research on different types of writing prompts and methods and scoring methods to assess writing skills of students with disabilities, struggling students and students who are English language learners. Students respond to a picture or sentence prompt by writing narrative or expository text for three to five minutes based on their age and ability.

For students with moderate to severe intellectual disabilities, Wallace, Tichá, and Gus-

tafson (2010) adapted the CBM approach to assessment to suit the teaching content and materials for this population and developed *general outcome measures* (GOMs). In addition to adapting the content for the measures, they also changed the format to a series of cards (s*ee Figure 2 below*) that were later adapted for use on touchscreen tablets (Abery & Tichá, 2018).

Figure 2. Example of GOMs

Use of CBM Data for Progress Monitoring: Case Study

One of the main benefits of using formative assessments such as CBM compared to summative, diagnostic and functional assessments is their specific design and purpose for being administered frequently (weekly or biweekly) to monitor student progress. Visual displays of student scores using graphs provide teachers, students and their parents with a trend of student learning as well as an indication of the effectiveness of teacher instruction.

As indicated below (*see Figure 3 on page 62*), the student Hasmik was initially unable to identify even one correct word. The teacher and Hasmik's parents were concerned that Hasmik was not learning at the same pace as her peers, suspecting a learning problem or a disability. The teacher set a goal for her to identify at least 17 correct words in seven months. In order for the student to be able to achieve her goal, the teacher implemented three different early reading interventions. The first intervention was effective for the student at the beginning of implementation, but was not producing the intended results after a while. The second early reading intervention was not very effective, and as a result, a third intervention was tried with the student, starting in the fifth month. This approach led to a significant improvement in word recognition for Hasmik to be able to identify 11 words in a minute, thus getting closer to her goal. Hasmik's teacher, with the help of a multidisciplinary team, graphed Hasmik's word identification data across seven months and used the data to see if Hasmik was making progress in the number of words she was able to identify based on the lessons. Hasmik's progress in word identification meant that she was able to focus on reading fluency and comprehension. By using formative assessment such as CBM, the teacher was able to demonstrate Hasmik's progress as a result of the interventions, and there was no need to refer her for a formal special education evaluation to identify a potential disability and label her unnecessarily. Using CBMs and tracking data also helped the teacher to understand which interventions were more and less successful with Hasmik.

As can be seen from this case study, assessment tools designed for progress monitoring have an important instructional value. They are able to provide the teacher, other educators, and the student and his or her parents with information directly related to the effectiveness of the curriculum and instruction on a regular basis. Progress monitoring also shifts the problem target from the student to the teaching environment and pedagogy. This type of assessment is a very much needed addition to the ICF approach that specifically focuses on

improving the child's learning. By monitoring the child's basic academic or behavioral progress, the teacher and multidisciplinary team will have the necessary information about the effectiveness of the approaches and materials they are using in class in order to successfully include struggling students or students with disabilities in regular education.

Figure 3. Case study: CBM graph of Hasmik's early reading progress.

Hasmik's Progress in Word Identification
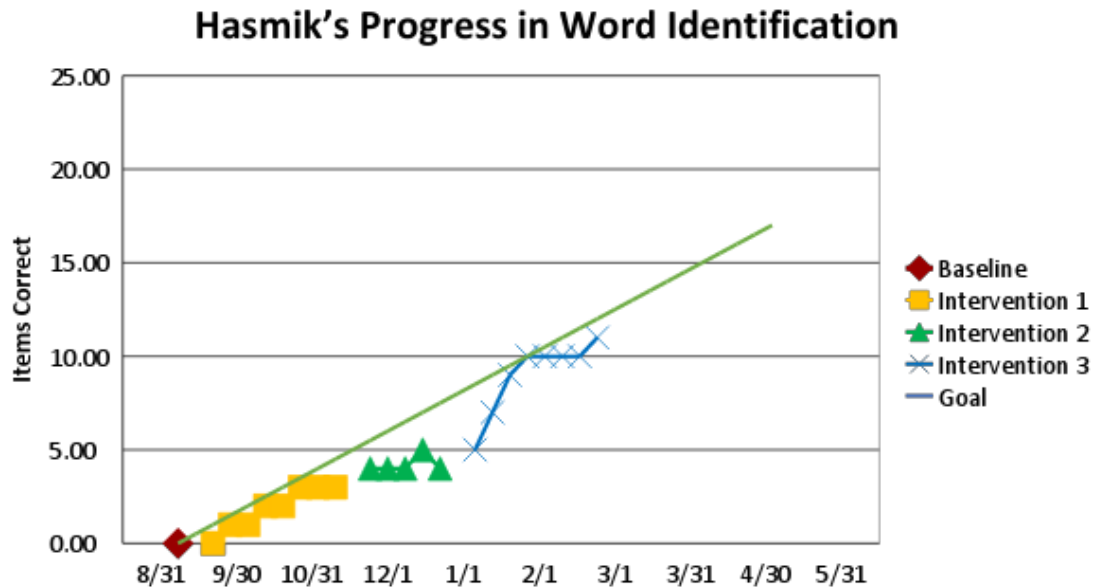
The Use of Assessment Data for ILP Planning

Once the assessment data is collected and reviewed, the team (from center, school and parent) need to prioritize the ILP goals and objectives based on the most important quantitative and qualitative information learned. The team needs to utilize their expertise and experience to prioritize which areas of the student need they are going to address first, second and third. For example, a student might need a functional goal (e.g., how to open a bathroom door), and at the same time need to learn how to greet their peers in a classroom (social goal). In addition, the team should identify academic goals, e.g., in reading or math. It is important that assessment data are collected on all the aspects of student needs (Svajyan, 2014, 2016).

Once ILP goals and objectives are established for each child, progress monitoring should be implemented to measure to what extent the student is improving in the areas identified by ILP goals and objectives as measured against the baseline data collection. Based on the progress monitoring data, additional supports and interventions or new goals and objectives should be implemented for each child by the team.

Interpreting Progress-Monitoring Data

The case study above illustrates the need for understanding data graphing and data interpretation by teachers and multidisciplinary teams. Because CBM is essentially sampling of a student's academic (learning) behavior, it is important that the samples and trends of student performance using each CBM measure are reliable. This means that at the beginning,

the student should read aloud or complete math problems using CBM at least three times within 1–2 weeks' time to assure that the scores reflect student performance accurately. The teacher should assess the student at least six times in 6–12 weeks to see if the intervention is working before instruction is changed again, if needed, based on the data trends. Visual displays of data, e.g., in graphs, are useful tools in data-based decision-making about the best instructional approaches for specific students.

The teacher, with assistance of the multidisciplinary team, develops a goal line for each student who is struggling, or already has an ILP, for each CBM measure. Each goal is based on existing expectations for the student at that grade level for a specific subject and the type of learning problem or disability. For students with a special education need, the goal will be recorded in their ILP. Students with disabilities, especially with more severe disabilities, will typically have a less ambitious goal to reflect their special learning needs.

One of the advantages of CBM and GOMs for students with significant disabilities over other types of assessments is their sensitivity to change. Historically, it has been assumed that students with more severe disabilities have very limited learning capacity and do not need to be exposed to academic content such as reading or math. CBM has been shown to reliably detect even slow progress of students with disabilities, thus providing teachers and other educators with the needed information about the effectiveness of their instruction for *all* students.

It has been beneficial to develop local norms and benchmarks for the different CBM measures to be able to set appropriate goals for students in each of the basic academic skills (Hosp, Hosp, & Howell, 2007). In order to develop norms and benchmarks, it is necessary to collect CBM data from a representative sample of the student population for which CBM will be used. Based on the data collected, benchmarks are established to indicate below average, average and above average student performance. This system assists teachers with using CBM data, not only in determining how the student is progressing over time, but also how he or she is progressing in comparison to other students in the school and school district.

Roles and Responsibilities in the Assessment Process

In Armenia, the responsibility for the assessment of children with disabilities or those at risk for disabilities lies at several different levels, including schools, regional psychological-pedagogical support centers (PPCs) and the Republic Assessment Center. The role of universities and other scientific organizations, however, should not be forgotten, especially in the development and evaluation of assessment appropriateness and quality. Assessments are not of much use if they are not developed for specific purposes or evaluated for their reliability, validity, sensitivity to change and usefulness for learning. An assessment that is not being used for its intended purpose, e.g., determining the type of services needed and monitoring progress, or that does not provide consistent and accurate data, can do more harm than good for the teaching and learning process. Universities and other scientific organizations are most appropriately equipped with the necessary knowledge and skills to develop and evaluate assessment properties and uses.

By preparing future teachers, current teachers and other specialists, universities and institutes of education play an important role in ensuring that those working in schools and centers have the capacity to select the right assessments for different purposes, administer them correctly, and interpret and use their data most effectively.

Summary

Over the past decade, the process of assessment has changed rapidly in Armenia. Current practice relies on the structural assumptions of the ICF–CY as a way to better understand how a child's impairment interacts with his or her environment. Specifically, assessments are used in all educational settings as a way to better understand how and why children may be functioning as they are. Recent innovations in Armenia include an increased focus on teacher use of assessment and its data to make educational decisions. A missing link to current practice, however, is assessment that can help teachers make instructional decisions based on the curriculum in their classrooms. Curriculum-based measurements (CBMs) provide a way for teachers to understand student progress on particular academic goals and plan instructional interventions to help children reach their individualized goals. CBM development is likely the next stage of progress in assessment for Armenia's schools.

Tips for Teachers

- Use data collected through different assessments to develop specific IEP goals and objectives that are SMART (specific, measurable, achievable, relevant and time bound).
- Collect sufficient data based on the student's learning need and disability type to be able to monitor progress and adjust instruction accordingly (three data points at baseline and six data points to evaluate the effectiveness of instruction).
- Adapt your formative and summative assessment to monitor student academic progress and performance to local curriculum.
- Use assessment data you collect effectively, and interpret it in the context of the teaching and learning environment.
- Collaborate with other members of multidisciplinary teams within your school and with resource center specialists.
- Involve parents in the assessment process.

Thoughts for Leaders

- Support and empower teachers and specialists in collecting and using all necessary assessments, including progress-monitoring tools, to promote student inclusion.
- Provide teachers and specialists with opportunities to discuss student data in relation to student inclusion in instruction and to share the data with parents and students.
- Ensure that teachers and specialists have the necessary training to implement assessments and interpret data.
- Monitor the coordination of assessments between schools and regional assessment centers for students who need extra support.
- Ensure that there is an effective collaboration between schools and the regional assessment centers.

Recommendations

- Develop progress-monitoring systems, e.g., CBM, for Armenia, including assessment materials and benchmarks.
- Train teachers and specialists in progress monitoring of students with disabilities in inclusive settings.
- Foster collaboration between teachers and specialists within schools and between schools and assessment centers to increase the appropriateness, accuracy and timeliness of the assessment process.
- Fund research at universities to develop and evaluate assessment tools and materials to reflect current needs, e.g., students whose first language is not Armenian and are lagging behind their peers in reading.

Reflection Questions

- For what purposes can you use curriculum-based measurement?
- How frequently should you use progress monitoring?
- How can you apply the progress-monitoring approach to assessment to the three-tier system of assessment in Armenia?
- How can you analyze assessment data for developing ILP goals and objectives?

Additional Resources

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Glossary

Curriculum-based measurement (CBM) — Type of formative assessment for progress monitoring of basic academic skills based on the local curriculum for students with mild disabilities.

Formative assessment — Assessment of student progress (for learning) that has a high instructional utility.

General outcome measures (GOM) — Type of formative assessment for progress monitoring of basic skills for students with moderate to severe disabilities.

International Classification of Functioning, Disability and Health for Children and Youth (ICF–CY) — is an international classifications developed by the World Health Organization that provides a framework for the classification of health and function.

Progress monitoring — Monitoring (collecting and graphing data) of student progress in basic academic skills on regular basis with the goal to modify instruction when needed

Psychological-pedagogical support centers (PPSCs) — Regional centers that conduct assessments at Level 2 of the Armenian assessment system.

Republic Assessment Center — National center that conducts assessments at Level 3.

Summative assessment — Assessment of student academic performance (of learning).

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CHAPTER 6:

Multi-tiered Systems of Support (MTSS): Response to Intervention (RTI) and Positive Behavior Interventions and Supports (PBIS)

Renáta Tichá & Brian H. Abery, University of Minnesota
Lilit Karapetyan & Araksia Svajyan, Armenian State Pedagogical University

Multi-tiered Systems of Supports represents a preventative framework that provides students who lag behind their peers with targeted academic or behavioral interventions to give them a chance to close the achievement gap.

Before reading this chapter, ask yourself the following —
- What supports do students who are struggling at school currently receive?
- What steps can be taken to avoid immediate referral to special education?
- How are student academic performance and behavior related?
- What supports does the general education teacher need to be able to address learning needs of all students?

Introduction

Armenia and the United States possess educational systems that are intended to serve *all* their country's children and youth, including those with disabilities. The two nations also share a common problem. In both, there are large achievement gaps between children with and without disabilities. Regardless of the country of residence, students who struggle with mastering basic literacy and mathematics skills in the elementary years experience significantly poorer educational outcomes. Similarly, students with emotional or behavioral problems are at a high risk for learning difficulties and generally struggle at school.

Improvement in literacy and numeracy knowledge and skills, especially for students with disabilities and other special education needs (SEN), has been emphasized through recent U.S. legislation. The No Child Left Behind (NCLB; 2002) legislation and its replacement, the Every Student Succeeds Act (ESSA; 2015), focus on the accountability of U.S. states with respect to the education of students from traditionally underserved populations and/or attending low-performing schools, including students with disabilities. This legislation and the reauthorization of the Individuals with Disabilities Education Act (IDEA; 2004) consider it important that *all* students are included in state and school accountability systems to demonstrate their learning progress as a result of evidence-based high-quality curriculum and instruction.

To ensure that students with and without disabilities have access to the general education curriculum, one very important aspect of inclusion, they must acquire sufficient literacy and mathematics skills and be able to manage their emotions and behavior. Effective procedures are therefore needed to ensure that these skills are learned early and their acquisition and mastery is assessed. To prepare all students to meet these expectations, educators need to have access to evidence-based practices that promote learning and behavior management (Copeland & Cosbey, 2008, 2009; Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008) and be able to effectively and efficiently measure progress.

Many students, both in Armenia and the United States, who struggle with developing basic literacy and mathematics skills or with their behavior may not experience disabilities, but can be the products of socioeconomic disadvantage (Biemiller, 2006; Chowdry & McBride, 2017; Farkas & Beron, 2004; Hart & Risley, 2003). Due to multiple factors associated with growing up in an environment in which parents struggle to meet the family's basic needs, such children often enter school without prerequisites that support learning (Downey, von Hippel, & Broh, 2004; Duncan & Magnuson, 2005; Reardon, 2003). As a result, they quickly fall behind their peers in the acquisition of basic skills (Lareau, 2003).

To ensure that *all* students in Armenia are able to acquire basic skills effectively, educational systems across the country must prepare teachers to provide differentiated and individualized instruction that meets the needs of students who struggle academically or behaviorally. In addition, evidenced-based practices that have been shown to be both feasible and usable in other countries need to be adapted to meet the needs of schools and implemented on a wide-scale basis. The response to intervention (RTI) and positive behavior interventions and supports (PBIS) frameworks, part of multi-tier systems of support (MTSS), have been implemented in many school districts and schools to assist with differentiated instruction to address diverse student learning and behavior needs. Multi-tier systems of support (MTSS) is a set of schoolwide instructional approaches, interventions and assessments designed to address the learning and behavior needs of *all* students. Both RTI and PBIS became part of national special education legislation in the United States in 2004 to assure adequate instructional support for struggling students in acquiring positive behaviors and basic academic skills, rather than directly referring students for special education evaluations.

The Response to Intervention (RTI) Framework

Response to intervention, or RTI (adapted from Tichá, Abery, & Kincade, 2018), is a multi-tier approach to the early identification, prevention and support of students who are struggling academically. It was developed in the United States to bridge the achievement gap of students from different backgrounds. It is a schoolwide intervention based on a preventative system of tiered instruction that provides struggling students with supports before, or instead of, their referral for special education evaluation and services. It is an instructional problem-solving model based on early screen-

ing and formative assessment and data-based instructional decision-making — a tiered approach to targeted intervention and high-quality instruction at multiple levels (Fuchs & Fuchs, 2006; Grosch & Volpe, 2013; Shapiro, Zigmond, Wallace, & Marston, 2011).

To ensure appropriate supports are present at all school levels, it is necessary for RTI to be implemented on a schoolwide basis. The purpose of this systems-wide approach is to provide educators with the tools to ensure that *all* students are learning, supporting students falling behind academically with targeted interventions to prevent their premature and unnecessary identification for special education services. The system is proactive and positive in the sense that it does not assume from the beginning that a student has a learning deficit, but rather that the teaching environment might be falling short of providing effective instruction for the student. RTI is also designed to foster collaboration between general and special educators and other specialists in the development and effective implementation of targeted interventions for students with disabilities to ensure they are making adequate progress.

If instructional resources of a school are visualized as a pyramid or triangle, they would be distributed into four quadrants (*see Figure 1 on page 70*). The largest quadrant at the bottom of the pyramid represents the general education (core) curriculum delivered within a general education setting (Tier 1). This instruction should be of high quality, evidenced-based and effective for the majority of students (approximately 80%). As many authors (e.g., Fuchs, 2003; Harry & Klingner, 2006; Klingner & Edwards, 2006; Vaughn & Fuchs, 2003) suggest, analysis of general education classroom instructional environments always needs to occur as part of the implementation of the RTI framework. When large numbers of students struggle academically, it typically indicates that the instruction they are receiving in the general education
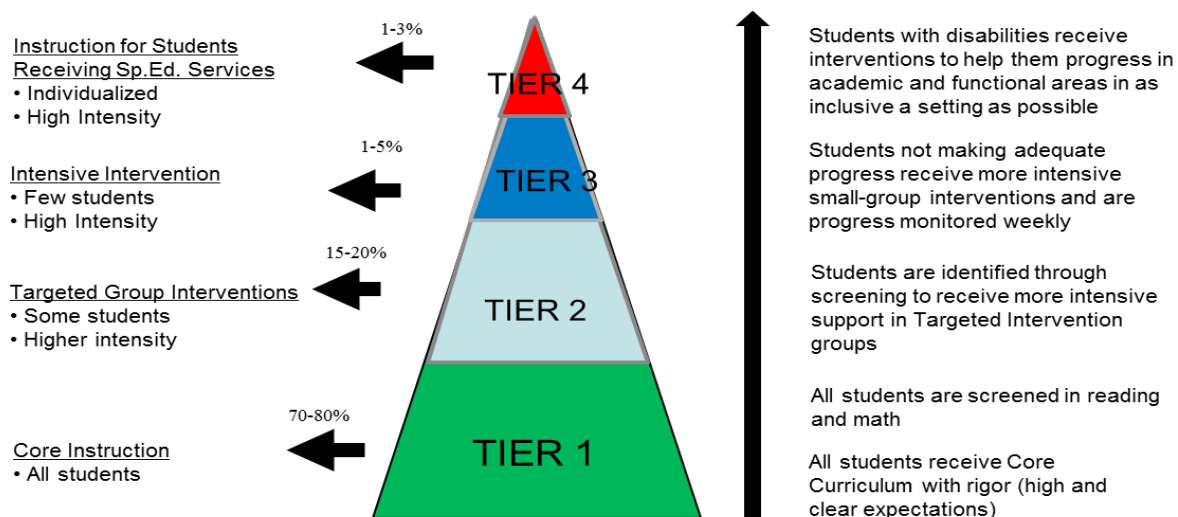
classroom does not meet their needs. Although such analysis typically takes place when RTI is implemented, all too often insufficient attention is paid to the role teachers play in the under achievement of students.

Students who do not respond positively to the core curriculum, even after necessary adjustments have been made to make material accessible to all students, are provided with Tier 2 supports. This typically includes small-group-targeted instruction focused on the development of basic academic skills (e.g., explicit phonics or reading comprehension instruction). Studies in the United States suggest that students who receive Tier 2 supports show significant gains in their academic performance (Gersten et al., 2009). When students do not respond positively, more frequent and intensive instruction with fewer students in the small group is implemented at Tier 3. At this level, not only is the group smaller, but the frequency or intensity of intervention is increased. Those students who, despite taking part in multiple interventions at Tiers 2 and 3, still do not demonstrate adequate learning on the basis of progress monitoring are referred for special education evaluation and services.

The RTI framework differs significantly from a student-deficit model, focusing on creating an educational environment supportive of *all* students. Within the framework, screening and progress-monitoring assessments are essential. Universal screening ideally occurs three times a year (fall, winter, spring) for all students, with the purpose of identifying those who are at risk and grouping those who are struggling into instructional tiers. This early prevention strategy ensures that students do not fall through the cracks of the educational system and lag behind their peers. Throughout the school year, a variety of short (i.e., 1–3 minute) formative progress-monitoring assessments are also administered, in some cases as frequently as every week (in Tier 3), to determine if students are profiting from instruction. In most cases, the formative assessments used in RTI are curriculum-based measures (CBM; Deno, 1992, 2003) described in Chapter 5. Following the RTI framework, students are placed into tiered instructional groups based on their screening data. This placement takes into consideration both their academic strengths and challenges. CBM is used to monitor student progress and

Figure 1. Response to Intervention (RTI) Framework

Instruction for Students Receiving Sp.Ed. Services
• Individualized
• High Intensity

1-3%

TIER 4

Students with disabilities receive interventions to help them progress in academic and functional areas in as inclusive a setting as possible

Intensive Intervention
• Few students
• High Intensity

1-5%

TIER 3

Students not making adequate progress receive more intensive small-group interventions and are progress monitored weekly

Targeted Group Interventions
• Some students
• Higher intensity

15-20%

TIER 2

Students are identified through screening to receive more intensive support in Targeted Intervention groups

70-80%

TIER 1

All students are screened in reading and math

Core Instruction
• All students

All students receive Core Curriculum with rigor (high and clear expectations)

their continued need for supplemental instruction.

Students who respond well to the general education curriculum continue to receive core (Tier 1) instruction. At-risk students who need further support receive differentiated instruction within the general education classroom. Differentiated instruction in small groups (Tier 2) can be administered by a trained teaching assistant, special educator or the general education teacher. Tier 2 instruction is conducted in small-group settings (6–8 students) approximately three times a week in 30–45 minute sessions, each using intervention strategies to supplement key concepts being taught in Tier 1 instruction. For example, in math, a sixth-grade class might be practicing algebra. The sixth-grade teacher would be instructing the class on algebra, while a small group of students might be simultaneously meeting with the teaching assistant or a special educator, who is reviewing the basic pre-algebraic mathematics skills of addition and subtraction and answering questions about past instruction, possibly implementing the same lesson but at a slower pace and with additional supports. This educator may also include pre-teaching (i.e., preparing students for an upcoming lesson) within the small-group sessions.

In every school, a relatively small number of students will not progress at an acceptable rate in spite of receiving Tier 2 instruction. These students, often referred to as non-responders, are not assumed to have disabilities, but rather viewed as in need of greater differentiation of instruction to build and reinforce basic skills. Potentially they could respond well to more intense targeted instruction (i.e., a 1:2 to 1:4 teacher-student ratio) or more frequent target instruction at a Tier 3 or an alternative curriculum. Special educators typically assume responsibility for the implementation of more intensive instruction with these students but do so within the context of the general education

setting (sometimes referred to as the push-in model). It is preferred that teachers with the most experience serve students with the highest needs (i.e., special educators or instructional specialists).

Within the U.S. educational system, those students who continue to struggle academically in spite of Tier 2 and 3 interventions are typically deemed eligible for special education services. These supports, which may be provided either within or outside of the general education setting, are based on individualized education plans (IEPs), and student progress is monitored on an ongoing basis.

The decisions about student placement in tiered instruction using data are made by data teams consisting of the general and special education teachers, school psychologists, instructional specialists and school leadership during data meetings. Data meetings are typically held monthly in each school for two hours at a time and are used to report on student progress using graphs and charts for everyone to see and discuss. Students who are falling behind their peers in core instruction or not progressing in tiered instruction as expected are discussed in more detail with respect to new approaches and strategies to help them succeed.

Research Evidence in Support of RTI

Multiple studies have been published on the effectiveness of RTI in the United States (Barnett, Daily, Jones, & Lentz, 2004; Hughes & Dexter, 2014; Vellutino, Scanlon, Zhang, & Schatschneider, 2008). The studies demonstrated improvements in student academic performance, academically related behavior and a greater precision in the identification of whether or not the student has a disability as a result of participating in RTI.

RTI Implementation

When a leadership team under the guidance of the principal is ready to implement RTI in a school, the following steps should be taken into consideration when planning such implementation —

1. Assess school readiness: e.g., infrastructure, resources, staff motivation.
2. Assemble RTI leadership team: e.g., principal, school psychologist, general and special education teachers.
3. Create infrastructure for RTI implementation: e.g., data team, instructional materials and strategies.
4. Evaluate and reflect: What aspects of RTI are working and what aspects need improvement?
5. Plan for sustainability: school staff taking on leadership roles in tiered instruction, assessment and data management.

Use of RTI for Identification of Specific Learning Disabilities

Since 1977 in the United States, students have been evaluated for specific learning disabilities (SLD) using the 'discrepancy' formula, (i.e., discrepancy between IQ and achievement scores). This approach to identifying students with SLD by highlighting the deficits that students may experience has been a subject of much controversy over the years, especially in relation to the issue of over identification of students for special education services (Vaughn, Thompson, & Hickman, 2003). The RTI framework that many school districts have adopted differs in its approach to identifying students with SLD. Student response to intervention is typically assessed biweekly in Tier 2 and weekly in Tier 3 using CBM. If the student is making gains toward reading or math goals set according to national or regional benchmarks, that is a sign that the intervention is effective for that stu-

dent. If, however, progress-monitoring data indicates inadequate gains for at least six consecutive weeks, the RTI team identifies the student as being at risk and recommends him or her for a special education services referral. Several studies in the United States have examined the effectiveness of using the RTI approach as a way to reduce the referral of students for special education services (Hughes & Dexter, 2014) as well as a valid procedure for identification of students as having SLD (Vaughn, Thompson, & Hickman, 2003).

Positive Behavior Interventions and Supports (PBIS)

One of the critical challenges to inclusive education voiced by administrators, teachers and parents are behavioral problems *assumed* to occur when students with special education needs (SEN) are educated with their peers (Cassady, 2011; Cook, Cameron, & Tankersley, 2007). These perceptions have been found to have a significant impact on the attitudes that educators and parents have about inclusive education and their willingness to implement initiatives in this area (Abrams, 2005; Avramidis et al., 2000; Ryan, 2009). In addition, research across national boundaries indicates that behavioral challenges (i.e., inappropriate behavior on the part of students while in school) that are not effectively addressed have a significant negative impact on academic performance (i.e., grades), school and classroom engagement, and graduation rates (Carr-George, Vannest, Willson, & Davis, 2009; Farmer et al. 2003; Mattison, 2008; National Center for Education Statistics, 2011; Schwartz et al. 2006; Staff and Kreager 2008; Wiley, Siperstein, Forness, & Brigham, 2010;). Given that students from recent immigrant groups and socioeconomically limited families tend to be more likely to be identified as experiencing behavioral challenges and subsequently segregated from their

peers, this issue is also strongly associated with educational equity.

Within the Armenian context, one of the most frequent complaints heard by educational faculty about the country's move toward inclusive education is the problem that general teachers experience with the behavior of students with SEN within the classroom. Complaints with respect to students not listening, their low levels of academic engagement and inability to focus, as well as inappropriate out-of-seat behavior (e.g., wandering around the classroom, bothering other students) are some of the primary reasons general educators provide when they argue that the inclusion of these students is not feasible (personal communication, Harutyunyan & Avagyan, 2018). Complicating matters is the traditional approach to educating children of all ages still used in most of Armenia. Classrooms are arranged so students sit in rows facing the front of the class, where their teacher spends most of her time lecturing them. Children are expected to sit calmly for long periods, only speak when spoken to and intently listen to their lessons. Frequent solicitation of feedback from students to ascertain their understanding of concepts being presented is a rare occurrence. Activity-based, cooperative and peer-assisted learning strategies are used infrequently, and problem-solving-based learning that actively engages students is not often observed. When children misbehave, the author's experience, confirmed by a host of other educators, has been that teachers shout at the children using coercion, complain to parents, or send such children to school administrators as punishment in an attempt to minimize such behavior.

Given the situation described above, it should not be unexpected that many students who struggle academically, are bored listening to their teacher, or experience limited self-regulation capacity find that one of the easiest ways to gain attention is to behaviorally act out in

class. The absence of educational assistants or aides in most classes and the fact that Armenia does not, at the current time, have a disability classification that focuses on emotional and behavioral challenges leave most general educators feeling frustrated. In addition, similar to the situation in the United States and other countries, the typical general education teacher receives limited information and practical experience dealing with behavioral challenges in their preservice training.

If the goal of the Armenian government with respect to inclusive education is to be achieved, general education teachers need to develop effective strategies that they can confidently use to manage the behavior of diverse groups of students in their classrooms. Approaches that focus on individual students (e.g., functional behavioral analysis) that are implemented only after behavior becomes a problem are insufficient. What is needed is a system-wide approach that focuses on ensuring that *all* students have the support to behave in an appropriate manner within the school context. One such approach is schoolwide positive behavior interventions and supports, or PBIS.

What is PBIS?

A relatively recent advance to address the behavioral challenges of students with SENs that is widely used in many schools in the United States is the implementation of *positive behavior interventions and supports* (PBIS). PBIS is an evidenced-based system of support designed to provide educators with proactive, positive strategies for defining, teaching and supporting appropriate student behavior, with the goal of creating a positive school environment (Bradshaw, Koth, Bevans, Lalongo, & Leaf, 2008; Sugai et al., 2000). This approach, which is based on ongoing progress monitoring and data-based decision-making at three different levels or tiers, attempts to minimize the negative attention to students from teachers

that typically far outweighs reinforcement for behaving appropriately and often serves to reinforce the behaviors teachers most want to minimize (Sugai & Horner, 2009).

In the past, classroom teachers in most countries were responsible for creating individual behavioral plans for students whose behavior was disruptive or socially inappropriate. However, such plans were typically developed only *after* a student engaged in inappropriate behavior for some period of time. In addition, the system's response was primarily negative in its orientation: focused on punishment-based strategies including reprimands, loss of privileges, office referrals, suspensions and expulsions. Research, however, has shown that the implementation of coercive, power-assertive forms of discipline alone (i.e., punishment) is ineffective. Such responses from teachers and school administrators tend to be used inconsistently, so students on at least some occasions experience reinforcement for their inappropriate behavior. Additionally, in the absence of positive strategies that teach students how to behave appropriately, such an approach results in only a temporary suppression of challenging behavior when authority figures are present, and does little to ensure students behave appropriately when teachers and school administrators are not close by (e.g., in the hallways, on the bus). Introducing, modeling and reinforcing positive social behavior is therefore an important step to ensure that student behavior is positive even when authority figures are not present (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). Teaching behavioral expectations and rewarding students for following them rather than waiting for misbehavior to occur before responding is a positive approach that helps children avoid challenging behavior in the first place, creates a positive classroom atmosphere for *all* students and leads to increases in student academic engagement.

When implementing PBIS, instead of using the traditional piecemeal approach of individual behavioral management plans, a continuum of positive behavioral support for all students within a school is implemented in areas including the classroom and non-classroom settings (e.g., hallways, buses and restrooms). Positive behavior support is an application of a behaviorally based systems approach to enhance the capacity of schools, families and communities to design effective environments that improve the link between research-validated practices and the environments in which teaching and learning occur. Attention is focused on creating and sustaining Tier 1 (universal and focused on all students); Tier 2 (targeted groups) and Tier 3 (individual) support systems that improve both social and academic results for all children and youth by making targeted behaviors less effective, efficient and relevant and desired behavior more functional. When PBIS is implemented in the intended manner, a school and classroom climate is established in which positive, appropriate behavior is the norm.

As Horner and colleagues noted (Horner et al., 2009) PBIS is based on a set of basic principles that have much in common with those underlying RTI. These include the following ideas —

- All students can be taught to behave in a socially appropriate manner;

- All students possess the behavioral capacity to engage in challenging behavior, but only some actually do;

- Intervening early and effectively using evidenced-based practices when challenging behavior is initially observed can prevent more serious problems in the future;

- Because each student is unique, schools need to provide a variety of forms of behavioral support that the use of a multi-tiered model of service delivery makes possible;

- The probability that schools will be effective in teaching students positive behavior and minimizing challenging behavior is directly related to the use of scientifically proven strategies and interventions (i.e., evidence-based practices);

- Decisions are best made based on the use of data, and monitoring student progress on an ongoing basis allows educators to make more informed instructional decisions;

- All students should be screened for behavioral challenges on a yearly basis.

The Components of PBIS

Four key elements are included in any PBIS program (*see Figure 2 in the next column*) and are implemented at each tier or level of behavioral support. These focus on —

- The student and schoolwide outcomes that teachers and administrators endorse and desire to see in their students and classrooms;

- Data, or the information that school personnel use to determine whether students are in need of additional supports, what these supports might be and the impact of teacher interventions (i.e., whether the interventions they use bring about desired results;

- The use of evidenced-based practices to support students and the school to achieve desired outcomes

- The supports that are needed to implement PBIS practices in an effective and sustainable manner.

Figure 2. SW-PBIS Model
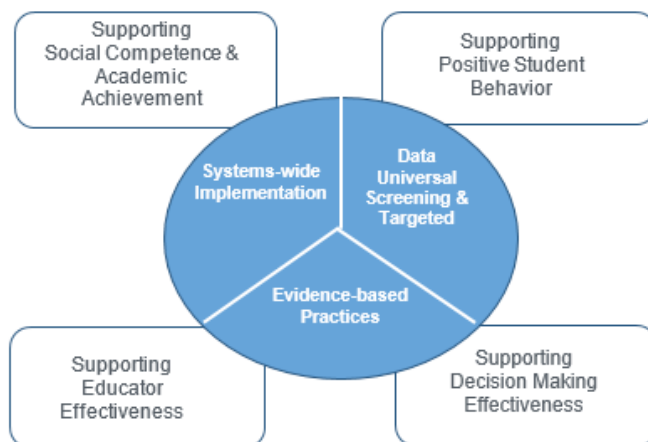
Employing this model, Evanovich and Scott (2016) suggested that, once adopted, PBIS can be implemented in four steps. The first involves identification of a school and classroom's most salient problem behaviors and the contexts in which they occur, including analysis to predict who, when, where and why. At the student level, this is typically accomplished through universal screening of all students for behavioral challenges they present to their teachers. In addition, educational staff collaborate in small groups or teams to share what they have observed as the most critical behaviors to target and the contexts in which they appear most likely to occur. Once the problems and their contexts have been identified, school personnel need to develop or identify evidence-based prevention strategies that minimize the occurrence of these behaviors. This involves not only decreasing the frequency of behavior that is problematic, but teaching positive replacement behaviors and routines that are incompatible with the student actions. A key third step in the implementation of PBIS is gaining schoolwide consensus among staff as to the prevention strategies that will be employed and maintaining the approaches that are agreed upon. This consistent approach to dealing with behavioral challenges needs to be adopted and implemented in all classrooms and other school

environments. To ensure that interventions have their intended impact and the program is implemented by staff and administrators with a high degree of fidelity, data need to be collected and analyzed so that program effectiveness can be established and any needed changes to the program are data driven (Todd, Sampson, & Horner, 2005).

As with 'response to intervention' discussed earlier in this chapter, the specific strategies employed at each tier in the implementation of PBIS need to match the unique needs of individual students and schools. Each successive tier is therefore focused on supporting the needs of students who have not been responsive to strategies used in lower tiers. The Tier 1 focus of PBIS centers on the entire school, with the goal of implementing positive strategies that will *prevent* the most common challenging behaviors across all students. As part of this tier —

- Classroom rules are operationally defined for each schoolwide behavioral expectation and posted in classrooms;
- Classroom routines and procedures are identified for activities where problems often occur (e.g., entering class, using the restroom, dismissal);
- Expected behavioral routines in classrooms are taught to students;
- Classroom teachers use immediate and specific praise;
- Students demonstrating adherence to classroom rules and routines are acknowledged in a positive fashion more frequently than they are for inappropriate behaviors;
- Procedures exist for tracking classroom behavior problems;
- Classrooms have a range of consequences and interventions for problem behavior that are documented and consistently delivered.

Developing structured classroom routines, using active instructional strategies that engage students, minimizing instructional down time during transitions between topics and subjects, engaging students in developing behavioral expectations, and ensuring that students are reinforced for positive behavior on an ongoing basis are all examples of strategies that can be used at this level. Effective Tier 1 strategies are employed by *all teachers with all students* within the school. Research suggests that these approaches will be sufficient with 75–80% of students within most educational environments (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; OSEP Center on PBIS, 2015; Sugai & Horner, 2009).

A good example of a Tier 1 intervention is the establishment of schoolwide programs to recognize and reinforce positive, socially appropriate student behavior. This is especially important given that research indicates that, in most schools, students receive 4–10 times as much criticism as opposed to reinforcement for their actions, even when they are engaging in productive, socially appropriate behavior (e.g., being academically engaged). Some schools have used 'gotcha' programs in an attempt to do a better job of reinforcing positive student behavior. The gotchas are a system for labeling appropriate behavior and prompt teachers and administrators to remember to catch students engaging in such actions. Schools can use Post-it Notes, Tweets, or text messages for gotchas, with copies going to parents, classroom teachers and administrators so that students can be publicly recognized for their efforts.

A smaller group of students who do not respond sufficiently to Tier 1 strategies (15–20%) receive more intensive supports aimed at preventing the most common behavioral problems identified from universal assessments undertaken as part of Tier 1 efforts. Interventions within Tier 2 are more intensive and developed on the basis of the systematic use of behavioral and academic data to determine student and school needs, monitor progress, and measure

school climate and program implementation fidelity (OSEP Center on PBIS, 2015; Sugai and Horner 2002). Tier 2 supports often involve targeted group interventions with 10 or more students. Individual PBIS plans at Tier 2 level are based on observations of the student (functional behavioral assessment) and other assessments to identify the function that problem behaviors serve. Fifty years of behavioral research indicate that most challenging behavior serves to allow individuals to —

- Escape unpleasant situations and activities or gain access to situations and activities in which there is a high probability of reinforcement (e.g., engaging in challenging behavior and getting sent to the principal's office to avoid a lesson that is disliked or completing one's required work quickly to gain access to more preferred activity;

- Escape or gain access to attention (e.g., refusing to make eye contact with the teacher when she asks the class a question or acting inappropriately to make peers laugh;

- Escape or gain access to sensory stimulation (e.g., leaving a noisy room or engaging in stereotypic behavior).

Individualized support plans can then be developed for students based on the analysis of the function served by challenging behaviors, which include —

- Teaching small groups of students to use new skills as a replacement for problem behaviors;

- Rearranging the environment so that problems can be prevented and desirable behaviors encouraged and

- Monitoring, evaluating and reassessing outcomes over time.

Tier 2 interventions include practices such as social skills clubs for students who need to learn alternative ways to respond to the behavior of others, check in/check out (Cheney, Stage,

Hawken, Lynass, Mielenz, & Waugh, 2009), and behavior education plans. Both Tier 1 and Tier 2 supports are typically implemented by general education staff in consultation with a PBIS behavioral support team composed of general educators, special educators, specialists and an administrator. Effective Tier 2 interventions should produce measurable changes in behavior as determined by direct observations and frequent monitoring of progress. When necessary, this data can be used to make adjustments when student progress does not occur within specified time frames (typically 4–6 weeks).

In spite of the implementation of Tier 2 strategies, some students need even more flexible, focused, personalized behavioral supports. Tier 3 provides individualized academic and behavioral interventions for this smallest group of students (3–5% of school population) whose continued behavioral challenges put them at serious risk for eventual segregation in special education classes or even school exclusion and dropout (Carran, Kerins, & Murray, 2005). The continuous monitoring of student behavior that is a part of the PBIS framework serves to identify those students who have been unresponsive to prevention efforts and provides data for the development of more intensive interventions to promote student success. Tier 3 interventions are intensive and evidence based and can include function-based behavioral interventions (FBA–BIPs) and person-centered plans. FBA–BIPs comprise individualized, assessment-based intervention strategies, including a wide range of options such as —

- Guidance or instruction for the student to use new skills as a replacement for problem behaviors through the use of strategies such as the development and implementation of individualized social stories to assist students in working out positive ways of behaving in specific social situations;

- Rearrangement of the antecedent environment so that problems can be prevented and desirable behaviors encouraged (e.g., providing students in need of less or more sensory stimulation with alternatives to screen out levels of stimulation that are too high (e.g., noise-canceling headphones) or provision of alternatives to increase stimulation (e.g., fidget devices);

- Procedures for monitoring, evaluating and reassessing of the plan as necessary. In some situations, the plan may also include emergency procedures to ensure safety and rapid de-escalation of severe episodes.

The Impact of PBIS: Research Findings

Over the past 20 years, considerable research has been undertaken in an effort to establish the impact of PBIS at both the school and student level. At the school level, research results indicate that a more positive school climate develops in schools implementing PBIS. This is evidenced by higher levels of student and faculty understanding of behavioral expectations and a stronger atmosphere of professional trust and respect (Houchens, Zhang, Davis, Niu, Chon, & Miller, 2017; Waasdorp et al. 2012); Over time, increased staff commitment to PBIS has been documented along with decreased staff turnover (Netzel & Eber, 2003).

Researchers have found a relationship between PBIS implementation and numerous positive student behavioral outcomes, including lower student aggression, disruptive behaviors, decreased student disciplinary action, and fewer office disciplinary referrals (ODRs) and suspensions (Bohanon et al. 2006; Bradshaw, Mitchell, & Leaf, 2010; Lassen, Steele, & Sailor, 2006; Luiselli, Putnam, Handler, & Fienberg, 2005; Mayer et al., 1993; Nelson, Martella, & Marchand-Martella, 2002; Nunn, 2017; Sadler & Sugai, 2009; Sugai & Simonsen, 2012; Warren et

al., 2003; Weiland et al., 2014). Cheney, Malloy, & Hagner (1998) confirmed a positive impact of PBIS on dropout rates. In addition, research suggests that students in school in which PBIS is used experience significantly lower rates of teacher-reported bullying and peer rejection than those in schools who do not use the approach (Waasdorp, Bradshaw, & Leaf, 2012). Findings suggest that the effects of PBIS on student behavioral outcomes tend to be greatest among at-risk and high-risk children (Bradshaw, Waasdorp, & Leaf, 2015).

The impact of PBIS on academic achievement is less clear but still suggests a probable impact. Nelson, Benner, Lane, and Smith (2004) found improvements in student reading scores after implementation of PBIS, and Muscott, Mann, and LeBrun (2008) found a connection between PBIS and math achievement. Sailor, Zuna, Chol, Thomas, McCart, and Roger (2006) concluded that students attending three middle schools and one K–3 school implementing PBIS showed improved school-level academic achievement across several areas. More recently, Horner et al. (2009) reported that the proportion of third graders meeting or exceeding state reading assessment standards was significantly higher in PBIS than non-PBIS schools.

Bradshaw et al. (2010), however, found no differences in reading or math achievement between students subjected to PBIS and those who were not. In addition, Childs et al. (2010) reported no significant increase in the percentage of students scoring proficient in reading of state-standardized achievement tests in PBIS-implementing schools. Houchins et al. (2017) concluded that while there were no significant differences in student achievement levels between PBIS and non-PBIS schools in their study, analysis revealed that student academic outcomes were significantly higher at high- and medium-fidelity PBIS schools than low-fidelity PBIS schools. This finding is consistent with the results of other investigations that

have demonstrated that positive outcomes are closely related to the fidelity with which schools implement various features of PBIS (Barrett, Bradshaw, & Lewis-Palmer, 2008; Childs, Kincaid, & George, 2010).

The Process of Implementing PBIS

In order to be effective, schoolwide positive behavioral intervention and supports must be implemented at a systems level. This ensures that resources needed to support and sustain the program are available. Typically, implementation starts with a team of approximately 10 members of a school attending a two- to three-day workshop on the approach conducted by skilled trainers. Teams include administrators, general and special education teachers, and educational specialists (e.g., social workers, school psychologists). After training, the team is responsible for —

- Developing three to five behavioral expectations for students at the school level that are positively stated and easy to remember. This process typically is focused on school personnel but can be extended to include parents and students, facilitating substantially greater support or buy-in from these stakeholders.
- The team then takes these back to the school to discuss with other staff with the goal of attaining buy-in for at least 80% of the staff.
- The team subsequently generates a matrix that provides detailed information as to what the behavioral expectations will look, sound and feel like in all classrooms and non-classroom areas (e.g., the bus, cafeteria).
- Team members next work with teachers to create matrices for each classroom that include examples of what it will look, sound and feel like to follow each expectation with-

in each classroom routine (e.g., entering and exiting the classroom, teacher instruction).

A second activity undertaken by the PBIS team is to determine how the behavioral expectations and routines they have identified will be taught in classroom and non-classroom settings. Possible approaches include —

- Using several days at the beginning of the year to take the students around the school to stations, where the skills are taught in setting specific locations.
- Teaching expectations within each classroom routine as they introduce each routine at the start of the school year.
- Providing opportunities for teachers and students to review and reteach expected behavior throughout the year.

The next activity of the PBIS team is to clearly define the specific student behaviors that merit administrative involvement (i.e., a trip to the principal's office and what behaviors will be taken care of in the classroom). At this stage, it is important to stress to teachers that it is critical that every staff member is consistent in how they respond to a student's challenging behavior.

PBIS provides teachers with tools to decrease disruptions, increase instructional time and improve student social behavior and academic outcomes. However, the preservice training received by most general education teachers rarely includes sufficient instruction in these areas. The school leadership team therefore needs to take responsibility for providing instruction to general and special educators with respect to —

- Ways behavioral expectations can be taught, modeled, practiced and observed.
- Procedures for effectively handling situations in which preventative approaches are not sufficient.

- Strategies to tailor behavioral support to students' specific needs and circumstances.
- Procedures for observing and praising students' appropriate behavior.
- Ways to use behavioral and academic assessments for data-based decision-making, including screening, diagnostic determination and progress monitoring.
- Merging classroom PBIS strategies with instructional design, curriculum and delivery.

Providing initial instruction in each of these areas to classroom teachers, however, is insufficient. The leadership team also needs to plan for monitoring the fidelity with which teachers implement the basic strategies associated with PBIS and offer opportunities for refresher training to ensure continued high-fidelity implementation. To effectively promote implementation of proactive classroom PBIS practices, the school team needs to invest in systems to support teachers: providing professional development opportunities, supportive and data-driven coaching, and staff recognition. In addition, it is critical to ensure the cultural and contextual fit and relevance of the PBIS system adopted, taking into account local environments (e.g., neighborhood, city) and personal characteristics (e.g., race, nationality) of students and their learning histories (e.g., family and social routines, customs).

The Need for Adapting RTI and PBIS to the Armenian Context

There are numerous similarities between the U.S. and Armenian cultures as well as the educational systems of these countries. Many differences, however, also exist that would likely decrease the feasibility and success of the RTI and PBIS frameworks as currently used in U.S. schools if directly applied to Armenia. Prior to implementing a systemic framework such as RTI and PBIS, the culture and education system in which it is intended to operate must be taken into consideration.

Implementation of the RTI and PBIS frameworks in U.S. schools tends to focus on system-wide in-service training, coaching and mentoring of educators, formative assessment and subsequent adjustments at the systems level based on student performance and progress data. Responsibility for instructional changes at Tier 1 and both the development and implementation of interventions at Tiers 2 and 3 lies with general educational personnel and intervention specialists, with some help at Tier 3, often by special education staff. Given the current level of resources available to schools and teachers in Armenian schools, it is clear that the traditional means of implementing the RTI and PBIS models will need to be adapted. Provision of systematic supports to students who are struggling academically or behaviorally in Armenian schools may provide an opportunity for a reconsideration of the role of specialists at psychological-pedagogical centers housed outside of school settings.

Tips for Teachers

- Seek assistance from your school's leadership to provide you with supports you need to be able to teach all students.
- Work with specialists to provide you with assistance to adapt materials and suggest strategies to address needs of students who need Tier 2 and Tier 3 instruction.
- Use assessment data to decide which students need more intensive instruction/intervention to make progress.
- Ensure that you praise students for good behavior and other achievements.
- Find out what is reinforcing for each student and use that for encouraging their academic performance and behavior.
- Involve students in setting expectations and rules for performance and behavior at

the beginning of the year, and follow those expectations with all students.

- Implement an instructional approach or intervention with struggling students for approximately six weeks while collecting data before you decide whether it is or is not effective.

Thoughts for Leaders

- Provide teachers with necessary materials and supports they need to teach all students.
- Participate in meetings when teachers and other specialists are discussing student data and their progress.
- Provide professional development for teachers to gain new knowledge and strategies for teaching all students.
- Provide opportunities for teachers, students and parents to celebrate their students' successes.
- Celebrate the successes and important milestones of teachers (e.g., completing a professional development course, being able to implement an effective strategy for a student with a disability in the classroom).

Reflection Questions

- What is the difference between Tier 1 and Tier 2 instruction?
- What is the role of assessment in RTI and PBIS?
- What are some reasons why a student might engage in challenging behavior?
- What are some Tier 2 and Tier 3 strategies for improving student academic performance?
- What are some strategies at Tier 1 and 2 one can use to improve student behavior?

Glossary

Data teams — Multidisciplinary teams of teachers, school psychologists, special educators and the like in a school who review and evaluate student academic and behavior data to make decisions about their progress.

Data-based decision-making — Process of making instructional decisions for students based on progress-monitoring data in reading, math and behavior.

Evidence-based practices — Instructional programs and strategies that have been evaluated for their effectiveness and that have demonstrated significant improvement in academic or behavioral student performance.

MTSS — Multi-tiered system of support that includes RTI and PBIS.

PBIS (positive behavior interventions and supports) — Schoolwide framework for addressing student behavioral needs by environmental and behavioral approaches to facilitate student learning.

Reinforcement — Stimulus (e.g., praise, reward, food) that increases the probability that a certain behavior will occur.

RTI (response to intervention) — Schoolwide framework of addressing academic needs of all students by differentiated instruction and continuous assessment.

Screening — Assessment of all students in a school conducted at the beginning, middle and end of the school year to identify students who are achieving significantly below average.

Specific learning disabilities (SLD) — Disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read,

write, spell or do mathematical calculations (IDEA, 2004).

Tier — Instructional level within MTSS (RTI and PBIS) where students are placed based on their assessment data.

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CHAPTER 7:

The Role of Individualized Learning Plans (ILPs) in Inclusive Education

Christopher Johnstone, University of Minnesota

Araksia Svajan, Armenian State Pedagogical University

Vergine Yesayan, Principal of Special School, Yerevan

This chapter provides background information on how ILPs work. These plans are designed to support inclusion by documenting individualized goals that students can work on in inclusive classrooms.

Before reading this chapter, ask yourself the following —
- How can an individualized learning plan (ILP) and individual specialized support services plan (ISSSP) support the learning of children with special education needs?
- Who should design ILP and PPSSP?
- How can you use goals in ILP and PPSSP to help plan teaching?
- How is assessment data used to help create goals for ILP and PPSSP?

Introduction

Any child who has special education needs (SEN) in Armenia requires a plan that allows him or her to meet individualized goals. According to the 2014 Amendments to the Education Law, Section 10.8, an individualized plan is a "document drawn up on the basis of state and subject related standards, programs of general education and the need of the child for special conditions of education, which sets the annual goal, tasks of organizing the education of the learner and the actions aimed at the implementation thereof (including support services)."

Individualized support plans have two components: individualized learning plans (ILPs) and individual specialized support services plan (ISSSP). ILPs are written documents that outline specific learning, social and functional goals for children with disabilities. PPSSPs are designed to help students meet educational, social and functional goals through specific therapies. These plans are essential in schools because the standards, teaching methods and outcomes of education may differ by child in inclusive settings. In Armenia, ILPs and PPSSPs are provided only for children with certified special education needs, according to the Amendments to the Education Law (2014). The purpose of the ILP is to provide a record of the goals and objectives for children with special education needs so that these objectives can be evaluated and changed over the course of a child's education in school.

ILPs are helpful for teachers, parents and students because they provide specific information about what a child is to learn in school. For example, a teacher who has a child with special education needs in the classroom can use the ILP to plan teaching. Within any given lesson, ILPs help plan for extra supports, adapt teaching aids or seek one-on-one help for a student to help the student understand the content. The PPSSP also helps teachers to know what extra services a child is receiving in the form of therapies or special teaching and helps therapists to plan their work for the child's needs. For parents, ILPs and PPSSPs provide a transparent way to see the academic, social and functional progress their child is making in school. Through annual reviews and progress updates, parents can observe that their child is getting the attention needed for participation and progress in school. Finally, students are the end beneficiaries of ILPs and PPSSPs because their educational program will be tailored to their specific needs. The paragraphs below show how ILPs are used in schools.

ILPs

Individual learning plans are a means for outlining educational goals for children with special education needs. Similar plans, called individualized education plans (IEPs), have been used for several decades in the United States as a means of documenting how children's legal rights are being met in schools. In

the U.S. setting, information about educational and therapeutic goals are combined. In Armenia, this information is found on two separate forms: ILP and PPSSP. In both cases, forms provide multidisciplinary teams with a record of decisions made on the educational, social and functional goals of children, including the regular teacher (Everett, 2017). The core feature of IEPs, ILPs and PPSSPs is the focus on SMART goals. Jung (2007) has described the features of a SMART goal (*see Box 1 below*).

Box 1. Smart Goals

> S - Goal should be **s**pecific
>
> M - Goal should be **m**easurable
>
> A - Goal should be **a**chievable
>
> R - Goal should be **r**ealistic
>
> T - Goal should be **t**ime bound

The example below is taken from an IEP in the United States that focused on the goals for a student with a cognitive delay. The goals are organized in three domains: academic, social and functional. This model helps to support the development of the 'whole child.' This particular child (Laura, *a* pseudonym) was functioning well below her peers academically, but was included in the regular classroom for part of the day. Rather than being set to the same expectations as her typically developing peers, her goals were *individualized* to meet her specific needs. The team created four goals for Laura. It was decided that she should spend part of her day in the mainstream classroom, but with individualized goals. The rest of her program was spent in specialized locations (within the school) where she could get exposure to basic life skills, therapies and specialized physical activities. The decisions on where Laura would receive services were negotiated by the multidisciplinary team, including her parents. The team decided that for certain basic skills train-

ing, Laura would benefit more from smaller classroom settings, while for others (access to academics), the regular classroom was the best location. Below are four of Laura's goals. These goals are specific, measurable, achievable, realistic and time bound. They reflect academics, functional skills and physical development. Each of Laura's goals (*see Box 2 below*) are based on her current level of functioning and an aspirational goal that allows for planning of her instruction and therapies for the next year.

Box 2. Laura's Goals

1. **Goal 1 (academic).** Laura will increase her ability to engage in classroom activities by using a mature grasp on classroom tools to copy prewriting shapes, draw a person with nine body parts, write her name, position scissors correctly and cut out simple shapes from 50% success to 80% success.
2. **Goal 2 (social).** Laura will increase her receptive and expressive language skills by increasing her ability to make complete independent requests from 40% to 75%, her ability to follow directions with targeted concepts from 25% to 60%, her ability to answer questions with targeted concepts from 10% to 50% and her expressive single-word vocabulary by at least five words per quarter.
3. **Goal 3 (functional).** Laura will be able to increase her locomotor skills (galloping and jumping) from her current level of performing 0 out of 4 performance criteria to 2 out of 4 performance criteria.

Laura's team decided that, in order to meet her goals, she would need the following supports —

- A small-group settings in the inclusive classroom at least once per day for 30 minutes to four hours (this option is not available in

Armenia, so other options would be needed for Laura in that country);

- Special movement training three days per week for 30 minutes each session;

- Occupational therapy one time per week for 30 minutes;

- Speech-language therapy six times per month for 30 minutes each session;

- The rest of the time Laura would be in the regular classroom, supported partially by a classroom assistant.

Overall, the IEP model is helpful because it keeps the individualized learning goals at the center of all decision-making on where the student will learn, what therapies are needed, and the time spent on particular activities. In this case, the team decided that in order for Laura to meet her individualized goals, a combination of small-group setting, educational assistant support, occupational therapy and speech therapy were needed. Each team member (teacher, classroom assistant, special teacher and therapists) will present evidence to other team members about Laura's progress at the following meeting. This sharing ensures that all team members are working together to help Laura achieve her IEP goals.

The Story of Alexan

Alexan is a boy with moderate reading difficulties who spent many days in class missing information. Soon he fell further and further behind, until an assessment team identified his reading difficulties. Once he was assessed, the team developed an individualized learning plan. For Alexan, this meant that each year he was expected to improve in reading, but not necessarily at the rate of other students. Because his plan was individualized, this also meant that he needed to work toward his individualized goals. His teachers set a goal that he would know 100 words by sight at the end of his Grade 3 school year. At the time of the assessment, Alexan had a sight word vocabulary of 42 words.

Alexan was in an inclusion class, so his teachers also gave him adapted materials to enable him to work with the other children on class activities. For Alexan, this meant that he would listen to an audio version of the books that other children were reading and that the speech therapist would work with him once per week on his sight-reading goal and on phonemic awareness. The speech therapist shared the list of 100 words that she hoped Alexan would learn so that the teacher could be sure to highlight these words when they were used in lessons, showing the whole class (not just Alexan) the importance of these particular words. Periodically the teacher would also quiz Alexan on his goal to see what progress he was making. The list of 100 words was also shared with Alexan's parents, so they could help him learn at home.

In addition to building his sight word vocabulary, the teacher assistant and speech therapist also worked with Alexan to identify how Armenian symbols (letters) make sounds. By being able to identify how written symbols create sounds, Alexan could begin to put sounds together in printed words and recognize the word. At the time his ILP was written, Alexan knew all the sounds of Armenian letters, but occasionally forgot, so needed additional practice to help him see the connections between letters and sounds. The story of Alexan highlights three key features of ILPs —

- ILPs document individual goals for students.

- ILPs outline special services a child may receive to help them achieve their individual goals.

- ILPs require the cooperation of regular teachers, specialists and parents to help meet goals.

- There is no 'special education' provided by one professional; rather, a team approach is used to help children meet their goals.

Alexan's Goals

As noted above, Alexan needed extra support in reading, which he received. Below is an example of a measurable goal for Alexan.

> **1. Goal 1 (academic).** By June 1, Alexan will identify 100 vocabulary words by sight from a list provided by his teacher.

The above goal has three distinctive features. First, the goal is *specific and measurable,* meaning that Alexan's teachers can track progress throughout the year. They can see if he has learned 10 words or 150 words and make adjustments to teaching and therapy accordingly. Second, the goal is *achievable and realistic*. Using the word *identify* signifies that Alexan can see and read a word aloud to a teacher or therapist. This is how his support team knows he is making progress. Words like *understand* and *know* are more difficult to observe unless they are accompanied by some way to demonstrate such knowledge. Classroom and other assessments are good ways to help children show their knowledge for measuring progress. Finally, the goal is *time bound*. This means that Alexan's support team can review the goal before and on the final date to see his progress. If he achieves his goal, it can be rewritten any time. If he does not, the multidisciplinary team should examine whether his support plan is helping him.

Alexan's second academic goal related to his ability to combine letter sounds to make words for reading. As noted above, Alexan could make connections between letters in print and the sounds they make, but occasionally forgot letter sounds, which made it impossible for him to read words. In a trial during his assessment process, the team found that his letter–sound correspondence rate was 84% (he almost always could make correspondence), but that 100% accuracy would help him in reading. Therefore, his team created Goal 2 (*see below*).

> **2. Goal 2 (academic).** By June 1, Alexan will improve his ability to correspond letters to sounds on 95% of trials.

In order to meet this goal, Alexan's speech therapist and teaching assistant would work with him in a one-to-one support mode to help him recall how letters connect to sounds. The team would occasionally use informal assessments to chart Alexan's progress.

Alexan's Goals 1 and 2 were academic, but goals may also focus on the social aspects of school. For example, it may be that Alexan's reading difficulties have caused him to be shy and withdrawn from his classroom peers. His multidisciplinary team may decide that a social goal is important to help Alexan mix well with others. An example of a social goal was created (*see below*).

> **3. Goal 2 (social).** By June 1, Alexan will engage in verbal conversation for a period of 10 minutes per day with a peer without prompting from the teacher.

This social goal was designed to help Alexan converse with other students. The teacher or his parents may help him to come up with conversation topics or socially appropriate ways to start a conversation. The goal is *measurable* because a teacher can count the number of minutes that Alexan is conversing and count the number of prompts it takes to help him start a conversation. It may take several prompts at the beginning of the school year, but he may converse independently at the end of the school year. The goal is *observable* because the teacher can visibly see Alexan conversing with others. Finally, the goal is *time bound* because it can be re-examined in June to evaluate Alexan's progress.

The Story of Adam

Adam is an eight-year-old boy. He has no sight. He is currently in eighth grade in an inclusive school. Adam can easily navigate in familiar space (at home and in the classroom), but he can't move independently in other areas of the school. He doesn't use a white stick yet, but his team believes this would help him to become more independent. Adam's intellectual development is consistent with other children his age, but he has difficulty in writing and takes a long time to find his materials when the lesson is starting. Finally, Adam is newly included in his school and has had difficulty making friends.

Box 3. Adam's Goals

1. **By June 1 (academic).** Upon teacher request, Adam will demonstrate comprehension of academic content through audio inputs (such as lectures or recorded books), Braille materials or other inputs at the 'proficient' level on a teacher-developed measurement 70% of the time.

2. **By June 1 (social).** Adam will ask for a peer for assistance in identifying materials if he is unsuccessful with school organization tasks (such as finding books), for over two minutes, for five out of five occurrences (100%).

3. **Short-term objective.** By March 31, 2018 (social), Adam will ask for help, with one reminder, when he is unsuccessful with school organization tasks (such as finding books), for over two minutes, for five out of five occurrences (100%).

4. **By June 1 (functional).** Adam will independently walk around school with the use of a cane to the correct desired location each day with 80% accuracy.

As part of Adam's plan, he received support in learning Braille, orientation and mobility from specialists. The school did not have resources for this at the time of the ILP, so the school needed to work with the district resource to find materials and a solution. Adam's goals reflect his academic goals (which are similar to those of other students, but adapted), social goals (which focus on his reaching out to others if he needs assistance), and functional independence (which focus on his finding his way around school without any help).

The Story of Anna

Anna is a six-year-old girl who has autism. She is in first grade in an inclusive school. She does not use verbal communication, but she can understand others' speech. She can also count to 5 using her fingers. In her class, she can understand certain topics. For example, she can recognize different animals, but does not yet know her colors. She can read environmental print sight words (such as signs like 'Exit') but does not always grasp the meaning of the words. In terms of mobility, she can independently move around the school, remembers where important rooms are and has no problem taking care of herself at meals or in the restroom. However, she has difficulty focusing in class and does not have many friends. Anna's ILP team met and decided to place their attention on Anna's focus in class, making friends, and learning colors.

Box 4. Anna's Goals

1. **By June 1 (functional).** Anna will remain on task for a classroom-based activity for a period of five consecutive minutes, with no more than five reminders with 80% accuracy.

2. **By May 25 (social).** Anna will initiate at least one greeting per day to a classmate or teacher with unlimited verbal reminders from teachers.

3. **By May 25 (academic).** Anna will point to the primary colors (red, blue and yellow) upon request from teacher and with color-oriented teaching materials with 50% accuracy.

All of Anna's goals helped her educational team to focus their efforts for the year. Although there were likely many directions the ILP could have taken in planning for Anna, the goals they wrote help her teacher, speech therapist and teacher assistant to organize learning activities. Later in this chapter, there is also a description on how Anna's mother's ideas were incorporated into her ILP goals.

Options for Supporting Children through Teaching and Goals

Although all goals in ILPs are individualized, some goals will create more inclusive opportunities than others for students. A continuum of support options for students in inclusive classrooms has been developed (*see Table 1 below*). The bottom row of the table provides examples of how these options might work for Alexan.

Table 1. Continuum of Support Options

	Standard	Standard, but with environmental or teaching changes	Standard, but with accommodations	Modified
Explanation	Child participates in classroom activities and expectations like all other children.	Child participates in regular classroom activities, but teacher makes small changes in teaching to help child. These can be integrated into regular classroom activities.	Child participates in regular classroom activities, but is provided changes to timing of assignments, delivery of content or how the student can complete assignments.	Goals that are nonstandard but needed in order to help the child be successful. These may be more difficult or easier than standard requirements.
Example for Alexan	Although Alexan has trouble reading, he has good math skills and can participate like all students.	Alexan participates in regular instruction in reading, but teacher makes an effort to accentuate and highlight important words that are part of Alexan's goals to learn.	Alexan struggles with decoding words, so he will be allowed to listen to an audio version of the book that other students are reading.	Alexan has a small sight word vocabulary, so his team created a special goal: that he learn 100 sight words this year.

ILPs in Armenia

The individualized learning plan process is relatively new to Armenia. According to the Action Plan for Implementation of Universal Inclusive Education System, Syunik marz (province) was the first pilot region for inclusive education and has been practicing inclusive education since 2017. Tavush and Lori marz followed thereafter. The processes for ILPs listed below are in progress in Syunik, Tavush and Lori and are presented as the most current form at the time of publication of this chapter. Further developments may occur at a later time. The step-by-step approach to ILPs follows the timeline below, and the actual form used is found at the end of this chapter.

1. First, if parents, teachers or principals suspect a child has a condition that is impairing his or her ability to perform in school, a parent conference is called. The school implements additional supports and school-based assessments. If the child needs further assessments and the parents agree, the assessment center is called and the child's basic information is shared with them.

2. Over the next several weeks, personnel from the assessment center perform a series of assessments and observations of the child within the school. Assessment experts may draw upon diagnostic assessments (for example, ICF); interviews with parents, teachers and the student; and classroom observations. At the end of the assessment period, an ILP meeting is called.

3. A multidisciplinary team (that should include student, parents, teachers, principal, relevant therapists and assessment center personnel) meets and develops individualized learning goals for students. If the child has therapeutic needs, a Individual specialized support services plan (ISSSP) is also developed.

At the initial ILP meeting, team members work through all the questions in the ILP form, answering them to the best of their ability. Once the final document is signed, it becomes a contract between the school, its employees, the assessment center, parents and the child. The plan is intended to have measurable goals that can be checked frequently for progress. The team reconvenes annually to check progress on goals and plan for the next year. An example of an ILP form used in Armenia is provided at the end of this chapter.

The ILP process is meant to be evidence informed and participatory. However, what is designed in theory and policy has not developed in practice. For example, the Center for Educational Researches and Consulting (2013) concluded that there are a variety of issues related to implementing ILPs in Armenia. The Center found that —

- Multidisciplinary teams do not have a clear understanding of their roles,
- Regular education teachers are indifferent to individualized goals,
- Personnel shortages have not allowed for individualized goals to be achieved, and
- Collaboration within the multidisciplinary team named above is weak.

There are at least two important considerations for ILPs that teachers should remember. These is listed below, with relevant resources.

Important Considerations for ILPs

1. Family involvement

Family involvement is essential (including students). Although teachers and assessment experts know children well, the experts on children's lives are their parents and the children themselves. In current ILP setups, parents are asked to provide narrative information about current levels of functioning, likes, dislikes and other information about their children. How-

ever, in the spirit of a truly individualized education program planning process, parents' and children's opinions should also be part of the decision-making process on educational goals, levels of support and ideas about the most important aspects of education on which to focus. One way of helping parents to become more involved is the MAPS process ('making action plans'). MAPS is a structured process that can help multidisciplinary teams — including parents and children — to look ahead and plan ILP goals to help reach the desired future. Box 5 (*see below*) provides an overview of MAPS (Vandercook, York, & Forest, 1989).

Box 5. MAPS Process

During the MAPS process, the ILP team members come together to answer five structured questions. This team may include the parent, child, teacher, social worker, assessment specialists and others. The five questions to be answered deal with the following —

1. **History** — parents and child can tell about the child's history. Memories and relevant life events should be shared here and documented.

2. **Dreams** — professionals, parents and the child share dreams for the future of the child. It may be that parental and children's dreams are different. In either case, identifying dreams helps plan goals that will help the child reach the future they wish.

3. **Fears** — professionals, parents and children share their worst fears about the child's future. These fears may be about consequences in school, the workplace or social life. This can be a very uncomfortable discussion, but again, help the ILP team to identify goals that will help avoid an undesirable future.

4. **Who is . . .?** — professionals, parents and the child answer the question "Who is . . .?" Using the example above, the team would ask "Who is Alexan?" and consider strengths, likes, social networks, personal qualities, favorite activities and so on. Negative characteristics can also be shared, but this should be done respectfully in front of the child. Knowing the whole child can both help with goal planning and add important documentation of strengths in an ILP process that otherwise focuses on difficulties.

5. **Needs** — based on the child's history, dreams, fears and understanding of self, the MAPS conversation should then focus on what the child needs to have a positive school experience in the future. This conversation is not as specific as educational goals, but provides a general map for setting goals such as 'more life skills training' or 'more focus on literacy' or 'more opportunities to make friends in the classroom.' The team (including parents and student) should identify what is needed to help the student develop optimally.

Source: Vandercook, York, & Forest (1989).

The MAPS process adds the important element of the child into the assessment practice. Currently in Armenia, assessment centers make diagnoses and send data to schools. School teams then usually write ILP goals based on assessment practice. At present, students are not asked about what is important to them and how their aspirations may translate into goals. The MAPS process (above) provides a way for teams to include the student's perspectives into the ILP process. Within educational, social and life skills areas, ILP teams may design goals that are related to the student's hopes for his or

her future. For example, Adam (the 8-year-old boy with a visual impairment described above) would like to have more friends and play on the playground. After the ILP team heard his desires, they built an additional goal for Adam to help him make friends. The goal is below —

1. **By June 1.** Adam will initiate conversation with peers through a question three out of five days per week within 30 minutes of school breaks. Questions might be "How are you?" or "What are you doing today?"

Adam's goal focuses on what he can do to create friendships with other students. By asking them about plans, he may find that children are more interested in including him in activities such as going to the playground during the break in academics.

2. Focus on outcomes

A second consideration for ILPs is to focus on outcomes. Parents and professionals will all have ideas about what they would like a child to achieve. The best way to ensure a child makes progress is by setting measurable and achievable goals. The COACH process (an acronym for *choosing options and accommodations for children*) developed by Giangreco, Cloninger, Dennis, and Edelman (1993) lays out a process similar to MAPS (above) that helps ILP teams begin to set initial goals. The process is as follows (*see Box 6 in the next column*).

Box 6. COACH Process

COACH is a simple way to begin structured conversations around setting goals for children. The section below covers ways in which to best set measurable goals, but the sentences below are examples of the COACH process —

Step 1: Family interview — to enable the family to select learning priorities for the student for the upcoming school year.

Step 2: Additional learning outcomes — to determine learning outcomes beyond what the family might have identified. Professionals, teachers and the student can help in this process.

Step 3: General supports — to determine what is needed to help the student reach her/his goals.

Step 4: Annual goals — Development of specific targets to be met one year from the ILP meeting. This helps parents and professionals to see what progress has been made.

Step 5: Short-term objectives — To reach annual goals, smaller intermediate steps should be identified to ensure progress is being made.

Step 6: Program-at-a-glance — Families and professionals go over the whole plan to make sure everyone is in agreement. This stage provides a final look at what the child's educational program will look like day to day and over the course of a year.

Source: Giangreco, Cloninger, Dennis, & Edelman, 1993

Similar to the example above, the ILP team decided to use the COACH process as part of the ILP development at Anna's school. In this case, the team learned that Anna's mother was concerned that Anna has emotional outbursts when she is excited or angry. At first, Anna's

mother wanted her to control her emotions, but the team thought that this was a good opportunity to teach Anna better ways to communicate what she is feeling to others. The team knew that Anna was not verbal, and so her outbursts were probably her way of expressing her emotions. Upon conversation, the team (including her mother) thought that giving Anna a communication board on her desk would help her to communicate her emotions. The teacher's assistant then created a page with different emotions and began teaching Anna how to show what she was feeling by using the board. The team then wrote the goal below for Anna.

> **1.** By June 1. Anna will use a communication board in lieu of yelling or hitting her desk to convey her emotions by pointing to 'emotion faces' on the board three out of five times. Mastery will be demonstrated by a decrease in yelling or hitting her desk and an increase in pointing to her communication board.

By employing the COACH method, the ILP team learned what was important for Anna as she continues to develop emotionally and academically. By including a social goal related to her emotions, the team incorporated Anna's family's concerns into the ILP process.

Conclusions

The ILP is one of the most important tools that can be used to help children with special education needs to exercise their educational rights in inclusive schools. ILPs provide an example of a 'best practice' in education because a multidisciplinary team is present and provides ideas for goals for the individual child. This team will always involve a parent. The core feature of an ILP is that it focuses on goals for the child. These goals should be stated in SMART format — specific, measurable, achievable, reasonable and time-bound terms so that they can be monitored throughout the year. Goals might be academic (focused on learning), social (focused on friendships and getting along with others or communication) or functional (focused on skills needed to live and work independently).

Tips for Teachers

- Use the SMART acronym to guide the development of ILP goals.
- When appropriate, address academic, functional and social goals in ILPs.
- Always involve parents and students in the design of the ILP.
- COACH and MAPS provide a structured way of having discussions on ILP goals.

Thoughts for Leaders

- ILPs help school teams plan instruction and service delivery for students with special education needs. School leaders must be present at ILP meetings so they know what resources may be needed and how their staff will accomplish goals.
- ILP teams (multidisciplinary teams) may rush to complete goals without considering the hopes and partnership of students and their families. Using the COACH and MAPS techniques will ensure these perspectives are considered.
- ILPs are individualized; therefore, goals from one student should not be simply copied for another student.

Reflection Questions

- What is an ILP, and for whom is it required?
- How can ILPs help therapists and teachers plan how they interact with children with special education needs?

- How can writing goals in SMART format help to ensure students' progress is accurately measured?
- Why is it important to consider the perspectives of students and families in the development of ILPs?
- How can COACH and MAPS help ILP teams to include student and family perspectives in the ILP process?

Additional Resources

Center for Parent Information and Resources (2017). *The short-and-sweet IEP overview.* http://www.parentcenterhub.org/iep-overview/

Heitin, R. (2018). *Writing IEP goals.* LD Online. http://www.ldonline.org/article/42058/

Glossary

Academic Goals — Any goal that relates to learning of academic content in schools that is written into a student's individualized learning plan.

COACH — An acronym for choosing options and accommodations for children, developed by Giangreco, Cloninger, Dennis, and Edelman (1993) that provides a structured process for facilitating conversation with multidisciplinary teams (including families) for individualized education plan meetings.

Functional/life skills goals — Any goal on a student's individualized learning plan that focuses on helping the student to live, communicate or take care of him or herself and navigate independently. Functional goals may set the stage for future independent living as adults.

Individualized education plan (IEP) — A written statement that outlines the educational plan of a child with a disability in the United States. This statement contains a narrative description of the student, assessment information, annual goals and space for commentary from the multidisciplinary team. Once signed, the team is legally bound to administering educational goals as outlined in the plan.

Individualized learning plan (ILP) — A written statement that outlines the educational plan of a child with special education needs in Armenia. This statement contains a narrative description of the student, assessment information, annual goals and space for commentary from the multidisciplinary team. Once signed, the team is required by national policy to administer educational goals as outlined in the plan.

MAPS (making action plans) — A structured process that can help multidisciplinary teams — including parents and children — to look to the future and plan IEP or ILP goals to help reach the desired future (Vandercook, York, & Forest, 1989).

PPSSP (psycho-pedagogical services support plan) — A written statement that outlines the therapeutic needs of a child with disability in Armenia. The PPSSP is agreed upon by a multidisciplinary team but is focused on the objectives of specific therapies to support the development of children with disabilities.

SMART goals — Goals that are specific, measurable, achievable, realistic and time bound. The SMART acronym is used in Armenia to help individualized learning team members develop goals that can easily be evaluated within a particular time period. Once evaluated, goals can be updated.

Social goals — Any goal on a student's individualized learning plan that focuses on his or her ability to communicate effectively with others. Social goals may include communication related to expressing emotions, skills related to making friends or goals related to being a contributing member of a classroom community.

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ILP Form Used in Armenia

Sample Education Organization Pedagogical and Psychological Support Services

Source: ILP Form, Syunq Region

(Typical form)

Date of filling in MARS completion ____ / _____ / _____

Persons involved in the ILP's development Last name, first name	Position	School, territorial center	Signature

I. Child personal information

Last name, first name	
Birth location	
Birthday day, month, year	
Gender ❏ female ❏ male	
Citizenship	
Residential address	
Phone	

Training: institution
Education-specific condition or need ❏ has (if has, then note: type)   ❏ no
Disability ❏ has ❏ no
Age:

II. General cognitive information about the child

Child's strengths
Child's weaknesses
Current levels of functioning (sound and speech, hearing, visual, intellectual/cognitive, motor performance levels) according to assessment data
Current health condition
Additional data

III. Characteristics of the child according to second-level capacities and cause-and-effect relationships

IV. Annual goals, according to the areas of development and results according to the targeted skills

Annual goals by development: spheres	Annual results by target skills

V. Short-term goals and objectives

Target and skills	Current level of functioning	Annual goal	Interim results

VI. Intermediate factors that may have an impact on child performance

Intermediate factor	Impact	
	Positive	Negative
Physical environment[?] (classroom, school and home)		
Lesson organizing		
Attitude (discipline, self, family members, teachers, friends, etc.)		
Child's character		
Training: topics		
Assist accessories		
Social and family condition		
Other, note:		

VII. Environmental adaptations[6] in the class

At school	
At home	

VIII. Child support services

Special pedagogical service	Time needed per week	Sessions per week	Assured by (person)	Schedule of services delivery
Speech therapist				
Physical therapist				
Sign language teacher				
Special pedagogue				
Psychological service	**Time needed per week**	**Sessions per week**	**Assured by (person)**	**Schedule of services delivery**
Psychological service				
Social pedagogy service	**Time needed per week**	**Sessions per week**	**Assured by (person)**	
Social pedagogue				

---

6   According to the negative factors

IX. Child's individual support plan assessment

Special pedagogical service

Responsible professionals: _____

_____

Annual reports were discussed in the areas of development[?]	Year-end results according to targeted skills	Final evaluation criterion	Semi-annual evaluation results by year-end standards	Evaluation method and timing	Evaluators
Goal 1	Target skills 1.1				
	Target skills 1.2				
	Target skills 1.3				
	Target skills 1.4				

Psychological service

Responsible professionals: _____

_____

Annual reports were discussed in the areas of development[?]	Year-end results according to targeted skills	Final evaluation criterion	Semi-annual evaluation results by year-end standards	Evaluation method and timing	Evaluators
Goal 1	Target skills 1.1				
	Target skills 1.2				

Socialization

Responsible professionals: _____

_____

Annual reports were discussed in the areas of development[9]	Year-end results according to targeted skills	Final evaluation criterion	Semi-annual evaluation results by year-end standards	Evaluation method and timing	Evaluators
Goal 1	Target skills 1.1				
	Target skills 1.2				

X. Biannual evaluation summary report

XI. Evaluation summary report

XI. Transition plan: recommendations for next year

Recommendation 1: _____

_____

Recommendation 2: _____

_____

Recommendation 3: _____

_____

Signatures —

Name, surname, official signature

Director: _____

Child: _____

Parent: _____

Pedagogical and psychological support team

_____

_____

_____

_____

CHAPTER 8:

Instructional Strategies for Inclusive Classrooms: PALS, Cooperative Learning, Direct Instruction and Play-based Strategies

Renáta Tichá, Brian H. Abery, & Kristen McMaster, University of Minnesota

Armenuhi Avagyan, Siranush Karapetyan, & Zhanna Paylozyan, Armenian State Pedagogical University

In order for a child to learn along with her or his peers, he or she needs to have access to the curriculum and materials being presented in the classroom. Instructional strategies, such as PALS or Play Based Strategies, make teaching content accessible to all students.

Before reading this chapter, ask yourself the following —
- Is technology needed in order to implement new instructional strategies?
- Is there a difference between a teaching strategy and a method?
- Is there a difference between instructional strategies for general and inclusive classrooms?
- What impact can instructional strategies have on student learning?

Introduction

While there are numerous pieces of legislation in place to begin the process of inclusive education in Armenia, as described in the introduction to this book, there are still barriers at the societal, school and classroom levels to making children feel included and successfully educated alongside their peers. In 2003, Armenian education reforms were directed toward development of new approaches and the promotion of quality education, particularly through changing classroom learning environments and concentrating on student-centered approaches, especially cooperative learning (Duda, 2011). One of the key issues still today is the lack of preparedness of general education teachers for teaching students with disabilities in inclusive settings. Anapiosyan, Hayrapetyan, and Hovsepyan (2014) reported that 90% of teachers lacked teaching methodologies that would effectively include children with disabilities in the class activities. This shortcoming often leads to either poor quality inclusion or even exclusion. Because of Armenia's history as part of the Soviet bloc, there remain approaches and stereotypes in Armenia about the teaching process. Teacher-centered education is still the norm. Due to the lack of technology infrastructure in Armenian schools, not many new approaches have been adopted to date. Further, new teachers are receiving some training in inclusive education, but those already in schools may have little knowledge or skill related to meeting the needs of students with special educational needs.

The process of education reform began in Armenia in 2004–2005, when many books were translated into Armenian or written on different teaching and learning and strategies as well as alternative strategies for the preparation of teachers. The Ministry of Education and Science and universities in Armenia are at the forefront of education reforms promoting new pedagogical approaches and methods in their policies, courses and teaching (Astvatsatryan, Arnaudyan, Ohanova, Eremyan, Hovhannisyan, Terzyan, & Lalayan, 2004).

Reforms in Armenia reflect worldwide trends in education. Worldwide, teachers encounter numerous aspects of diversity in the classroom that include children with different language skills, children with disabilities, gifted children and children from different social backgrounds. Many teachers are asking for new methodologies and approaches to teach their students. In Armenia, teachers are expected to use the latest pedagogical methods of knowledge transfer and child development to equip their students with values to help them become exemplary and productive Armenian citizens (Duda, 2011). However, teacher-centered approaches are still widely used and target the 'average' student. Such approaches do not work well with diverse student learning needs (Subban, 2006). Little is currently known about teachers' experiences in creating inclusive classrooms in Armenia. To this end, the identification of children's current

educational functioning is paramount to inclusive education so that teachers can select the approaches, techniques and methods that are most appropriate for children (Harutyunyan, 2017).

The Importance of Differentiated Instruction for Diverse Students

Differentiated instruction is a necessary approach for teachers to use to address the needs of all students in an inclusive classroom. Differentiated instruction does not require expensive technologies, but rather evidence-based low-tech teaching strategies. In theory, most educators believe that adapting their instruction to students' diverse needs makes sense, but many of them do not differentiate instruction in practice (Suprayogi, Valcke, & Godwin, 2017). This can be for many reasons, including being accustomed to a certain teaching style, not having the necessary preparation or attributing student failures to student weaknesses rather than to ineffective teaching.

Tomlinson (2005) defined differentiated instruction as a philosophy of teaching that is based on the premise that students learn best when their teachers adjust their instruction according to the differences in student readiness levels, interests and learning profiles. The main objective of differentiated instruction is to maximize every student's ability to learn (Tomlinson, 2004, 2005). Tomlinson (2005) pointed out that there are many ways of differentiating instruction that can be adopted based on the needs of students in the classroom. Thus, to differentiate instruction is not just a teaching strategy, but a specific pedagogical approach to teaching and learning. Differentiating instruction may mean teaching the same material to all students using a variety of instructional strategies, or it may require the teacher to deliver lessons at varying levels of difficulty based on the ability of each student. In order to

be able to differentiate instruction truly based on student learning needs, educators become decision makers who make decisions in the following phases —

1. Planning instruction (the pre-assessment phase),
2. Guiding instruction (the ongoing or formative assessment phase) and
3. Evaluating instruction (the summative assessment phase), as outlined by Moon (2005).

Assessment is clearly tied to differentiating instruction in assisting educators in evaluating formatively and summatively whether their instruction promotes learning in all students.

Not all students learn at the same pace and in the same way. Historically, variability in student learning due to differences in ability, race, gender, and linguistic and socioeconomic background has been used as justification to segregate students into institutions, special schools or separate classrooms. This approach has resulted in discriminating against certain students and preventing them from having an opportunity to learn along with their peers (Gevorgianiene & Sumskiene, 2017; Noltemeyer, Mujic, & McLoughlin, 2012). This is a very problematic practice because it violates Article 24 of the Convention of the Rights of Persons with Disabilities (CRPD). This Article proclaims that inclusive education is a fundamental right of all children, including children with disabilities. It stipulates not only that children with disabilities should not be discriminated against, but that they should be provided with an opportunity to receive high-quality education in the general education system along with their peers.

Differentiated instruction provides an avenue for adapting instruction and teaching materials to students' learning needs, thus providing students with the opportunities to learn in appropriate ways. Teaching in a tradi-

tional manner that suits the 'average' student is outdated and insufficient. Such a practice promotes discrimination against students who require alternative pedagogical approaches to succeed at school. Differentiated instruction is no longer an option; it is a necessity.

Differentiated instruction has been adopted and practiced in the United States, Canada, Australia and Western Europe in response to the need to accommodate diverse learners (Suprayogi, Valcke, & Godwin, 2017). Other countries, including those in Central and Eastern Europe, are currently searching for approaches to respond to the recent ratification of the Convention of the Rights of Persons with Disabilities (CRPD) and its impact on inclusive education. Part of this requires developing new strategies for inclusive classrooms.

In Armenia, in recent years, emphasis has also been placed on instructional differentiation to support the learning of all students. For example, Arnaudyan, Gyulbudaghyan, Khachatryan, Khrimyan, and Petrosyan (2004) wrote a manual for teachers on professional development for different teaching methods and strategies to be able to make learning more interactive. In addition, Vardumyan, Harutyunyan, Jaghinyan, and Varella (2003) have written a manual on the approaches, theories, methods and assessment in current pedagogy.

The manuals are specifically designed to assist teachers in the inclusion of students with special educational needs in teaching and learning. With the help of Step-by-Step and IREX, nonprofit organizations in Yerevan, many educational materials for teachers and parents were translated to Armenian from other languages to bring in more participatory and interactive approaches.

Subban (2006) and Suprayogi, Valcke, and Godwin (2017) reviewed the research supporting the effectiveness of differentiated instruction and found many positive outcomes, including increased student motivation, engagement,

achievement and self-confidence as well as teachers' better sense of self-efficacy. The research also demonstrated that more experienced teachers were more likely to be open to using differentiated instruction compared to less experienced teachers.

In their inventory of differentiated instruction dimensions, Suprayogi, Valcke, and Godwin (2017) synthesized the key aspects of differentiated instruction: coping with student diversity, adopting specific teaching strategies, invoking variety in learning activities, monitoring individual student needs and pursuing optimal learning outcomes. The purpose of this chapter is to specifically focus on adopting specific teaching strategies, with the goal of pursuing optimal learning outcomes for all students.

Three Teaching Strategies for Diverse Learners

Different teaching strategies can be used at the classroom level to address the needs of diverse learners. In the following paragraphs, we highlight three approaches that may be useful in Armenia. These approaches are based on empirical evidence in other parts of the world, but require future research in the Armenian context. These strategies may allow for greater instructional flexibility and can be applied to multiple subjects and at different grades. These methods have not only been shown to produce better student outcomes, but also make learning more interesting and engaging. Aspects of these approaches can also be used by special educators, psychologists and speech therapists in their individualized work with students. These strategies can be used for students with different types of disabilities and related problems. Additional adaptations may be required for students with sensory impairments and for students with more significant disabilities. The strategies that will be described here in more detail are —

1. Peer-assisted learning strategies (PALS),
2. Cooperative learning and
3. Direct instruction.

Peer-assisted learning strategies (PALS)

Peer-assisted learning strategies (PALS) is a research-based instructional program with evidence of effectiveness for classroom use. See McMaster, Fuchs, and Fuchs (2006) for a review. The main purpose of PALS is to support the learning of all students through peer (classmate) support. PALS was designed to accommodate academic diversity in general education classrooms (Fuchs, Fuchs, Mathes, & Simmons, 1997) and can include *all* students in the classroom. Because students work with peer partners during PALS, the teacher can differentiate instructional materials, pacing and feedback to target individual students' learning needs. While using this strategy, teachers carefully partner a student with a classmate. Partners then work together on various activities that address the academic needs of both students. Pairs are required to be changed over time so that children can learn from a diverse set of peers. Below is a description of PALS components that allow for this differentiation and specific PALS activities designed to foster reading fluency and comprehension in Grades 2–6 (ages 7–12). Tips for teachers are provided at the end.

PALS partners. In PALS, higher-performing readers are paired with lower-performing readers to practice critical reading skills. Typically, the teacher rank orders all the students in the classroom based on reading skill level, using recent reading assessment data. Then, the teacher splits the rank-ordered list in half and pairs the top student from the top half with the top student from the bottom half, and so on, until all students are paired. This way, each pair includes a stronger and a weaker reader, but the differences are not so large as to intro-

duce frustration between partners or difficulty in selecting appropriate reading materials. The teacher also considers students' social and behavioral skills and adjusts pairs accordingly. Pairs work together for about four weeks, and then the teacher reranks the class (again using recent assessment information) and creates new pairs, allowing students the opportunity to work with a variety of peers.

Reciprocal peer tutoring. During PALS, partners take turns being Coach and Reader: One student provides encouragement and correction to the other student (who is reading). The teacher provides explicit training in these roles and PALS procedures through brief scripted lessons and provides a set of structured prompts and corrective feedback for the Coach to use while the Reader reads. In each PALS session, students take turns as both Coach and Reader, allowing the weaker Reader to observe a more fluent reading model and practice critical skills with immediate feedback, while providing the stronger Reader with the opportunity to practice and refine critical reading skills. The highly structured, consistent procedures allow students to conduct PALS independently, and they foster high engagement.

Differentiated reading material. Because students work in pairs during PALS, the teacher can select material that is appropriate for the weaker Reader in each pair. Given the relatively small discrepancy between partners (as described above), the material should also be appropriate for the stronger Reader. In Grades 2–6, PALS is conducted with classroom reading material (e.g., trade books, leveled readers, basal readers or content-area texts). The teacher selects texts at the instructional level of the weaker Reader (i.e., the weaker Reader should make no more than one error per 10 words read). Often, the teacher allows student choice by providing an array of texts of different genres for pairs to select. Students read multiple texts across the school year during PALS.

Teacher monitoring and positive reinforcement. Because students work in pairs during PALS, the teacher is able to walk around the classroom to ensure students are following procedures, to determine that reading materials are appropriate and to provide individualized feedback as needed. Teachers can award points to pairs for engaging in specific reading behaviors (e.g., reading with expression) and social behaviors (e.g., providing help to the Reader). PALS pairs also award themselves points for completing each activity. Points are recorded on a point sheet that is shared between two partners. Each pair is placed on one of two teams. At the end of the week, pairs report their weekly point total, and points are added up for each team. Both teams are recognized for their hard work. Planned positive reinforcement is very effective in promoting desirable change in student behavior. It teaches students to take responsibility for their work and behavior.

PALS activities. PALS for Grades 2–6 focuses on fluency and comprehension skills and includes four main components: Partner Reading (students reading to each other out loud), Retell (paraphrasing the meaning of a story to student peer), Paragraph Shrinking (summarizing a story to a peer) and Prediction Relay (making predictions about the next steps in the story). The teacher introduces, models and provides practice in each activity across 12 lessons. Then PALS pairs implement the activities for approximately 35 minutes per session, three times per week. We recommend that PALS is implemented for a minimum of 15–18 weeks, which is the typical duration of PALS implementation in research.

Teachers select texts that are at the weaker Reader's instructional level (i.e., at the current level of reading for the student — even if that current level is not grade level). Partners share one copy of the text. During each PALS session, Partner Reading is first implemented for 10 minutes. The stronger Reader reads for five minutes to provide a fluent model. Then, the weaker Reader reads the same text for five minutes. The Coach (whoever is not reading) follows along and provides corrective feedback. If the Reader makes a word-reading error, the Coach points to the word and says, "Check it." The Reader can either self-correct or ask for help, in which case the Coach says, "That word is _____. What word?" The Reader repeats the word and then rereads the sentence. The Coach marks one point for each correctly read sentence. After the weaker Reader reads, the stronger Reader prompts a Retell of the story by asking, "What happened first, what happened next," and so on, for 2–3 min. The pair marks up to 10 points for this Retell.

Next, Paragraph Shrinking is implemented for 10 minutes. The stronger Reader reads first. After each paragraph, the Coach prompts the Reader: "Name the most important who or what," "Tell the most important thing about the who or what" and "Say the main idea in 10 words or less." The Reader earns one point for each response. If the Reader is stuck, the Coach helps by asking the Reader to skim the paragraph, providing a hint, and providing an answer if needed. After five minutes, the weaker Reader reads *new* text for five minutes, following the same procedures.

Last, Prediction Relay is implemented for 10 minutes. The stronger Reader again reads first. This time, the Coach asks the Reader, "What do you predict will happen next?" and the Reader makes a prediction. The Coach says, "Read half a page," and the Reader reads. Then, the Coach asks, "Did your prediction come true?" and the Reader confirms or disconfirms the prediction. The Reader earns one point for each response. The Reader earns points whether the prediction is correct or incorrect. This process continues for 5 minutes, and then the weaker Reader reads *new* text for 5 minutes, following the same procedures.

Cooperative Learning

Cooperative learning is a strategy designed to be implemented with an entire classroom of diverse learners across the curriculum. Cooperative learning was developed by Roger T. Johnson and David W. Johnson at the University of Minnesota. During cooperative learning, students are organized and work together in small heterogeneous (mixed ability) groups to maximize their own and each other's learning. After receiving instructions from the teacher, the students work on an assignment until all group members successfully understand and complete it. Cooperative learning is based on the premise that students benefit from each other's skills and knowledge, and they are working toward the same goal — to accomplish learning tasks. Cooperative learning facilitates active engagement in a community of learners. By facilitating learning in diverse groups, students are being prepared for life in today's society. Cooperative learning groups can be informal or more structured.

Research evidence

Johnson and Johnson and other researchers have conducted many studies to show the positive impact of cooperative learning on student academic achievement and social development (Fox, 2001). They found that some of the benefits of cooperative learning include higher level reasoning, more frequent generation of new ideas and solutions, greater transfer of what is learned within one situation to another, increased creativity and higher levels of self-esteem (Johnson & Johnson, 1994).

Components

In cooperative learning, small-group activities have several key components, according to Johnson, Johnson, and Holubec (1993): positive interdependence (students depend on one another' skills and knowledge to succeed), promotive interaction (students motivate and help each other to learn), individual and group accountability (evaluation of individual and group contributions to ensure the group activity benefits all), interpersonal and small-group skills (building social skills to work well as a team) and group processing (providing group feedback).

Inclusion

Cooperative learning was designed to promote the inclusion of *all* students (Johnson & Johnson, 1994). It is a tool that aids teachers in engaging students with different levels and types of abilities in instruction. Cooperative learning has also been shown to promote social inclusion, in the form of increased student acceptance and liking, for all students, including those with disabilities. The researchers found that when students without disabilities collaborate with their peers with disabilities on instructional tasks, their sense of empathy and altruism as well as an ability to view situations from a variety of perspectives improves.

Strategies

In order for cooperative learning to produce the best results, a cooperative school atmosphere needs to be established for all students and educators to feel included in the process. Criteria about 'helping' should also be outlined for students to know both how to ask for help and to ask if someone else needs help. In order to successfully include students with different types of disabilities, multimodal instruction within the cooperative learning framework should be implemented. Students with more significant disabilities typically require a more concrete presentation of content using visual, manipulative and experiential opportunities. When creating heterogeneous groups, all aspects of diversity should be considered. Students can be provided with input when

forming the groups, but teachers need to utilize their expertise about students' strengths and challenges to best facilitate inclusion that goes beyond physical presence in the classroom or in a group. To facilitate active engagement of all students, materials, roles and responsibilities need to be carefully planned and distributed among students (Sapon-Shevin, Ayres, & Duncan, 1994). In more formal cooperative learning groups, students take on different roles: leader, recorder, timekeeper, materials manager, encourager, presenter, data collector or errand monitor.

Types

Cooperative learning can be implemented using different techniques, including *student teams achievement divisions* (STAD), *jigsaw procedure*, *team-accelerated instruction* (TAI), and other cooperative learning structures, such as a *three-step interview* (Mehta & Kulshrestha, 2014). In a student team achievement division (STAD), students work as teams to ensure that all members have mastered the objective. Each student takes an individual test on the material, and scores are averaged for each team. In a jigsaw procedure, each group member learns an essential part of the topic by working with an expert group and then returns to the home group where the members work together to combine the knowledge to complete the task (Jolliffe, 2005). Team-accelerated instruction (TAI) is used in math, where it combines quality interactive instruction with cooperative learning. Students receive instructions on the topic from the teacher in small homogeneous teaching groups. Students then practice the skills learned in four- or five-member heterogeneous learning teams at their own pace, using materials appropriate to their specific needs (Luebbe, 1995). The three-step interview strategy focuses on developing students' active listening skills, helping to develop student note-taking skills and the ability to share information with others. Students are placed into groups of three, and each is assigned a role: interviewer, interviewee and note-taker. The roles rotate after each interview. Students take turns sharing the information they recorded when they were taking notes (Cox, n.d.).

Implementation

When incorporating cooperative learning in your instruction, plan for necessary supports of students with disabilities and struggling learners to assist them to be successfully engaged. For example, if students are reading any materials, make sure that the reading level is appropriate for the students. If a student has a hearing impairment or is nonverbal, ensure that they have an effective way to communicate via sign language, pictograms or technology. If the student has a physical disability and is unable to use hands or fingers to write, have an alternative strategy in place, such as an assistant note-taker or a speech-to-text device. For students with disabilities, cooperative learning often works well when implemented together with direct instruction to teach basic concepts before students work together in groups (Mehta & Kulshrestha, 2014; Pedrotty Rivera, 1996).

Collaborative Learning

The terms *collaborative learning* and *cooperative learning* are sometimes used interchangeably, even though there is a difference between the two concepts. Collaborative learning is a more general term that refers to students actively working together, while cooperative learning uses more structured ways to support student teamwork, as described in the previous section. Collaborative learning stems from a constructivist approach to teachers and learning and encourages students to interact and work together in flexible ways to elicit meaning. In cooperative learning, the teacher exercises her

or his expertise to guide students in working in groups according to specific rules and roles.

Collaborative and cooperative learning are both taking place in Armenia. Mkrtchyan, the deputy minister of education and a former student of V. Dyachenko, has implemented and conducted research since 1984 (Mkrtchyan, 2012) on a *collective approach to teaching*. This approach is based on the collaborative and cooperative learning approach. This collective approach promotes collaboration in teams and is designed to improve both academic and social outcomes. The implementation of this new approach and the transition from a more traditional approach to collaborative and cooperative learning has been conducted in several stages. Mkrtchyan enriched the collective teaching approach with approximately a dozen up-to-date methodologies that are successfully applied in a number of schools in Russia and Armenia. Mkrtchyan's research has demonstrated positive results, not only in Armenia but also in Russia and Kazakhstan. In addition, the *Collective Teaching Method* scientific journal has been published in Armenia since 1995 to promote the application and expansion of the collective approach in Russia, Armenia and Kazakhstan.

Hovhannisyan, Harutyunyan, Khrimyan, Khachatryan, Bayatyan, Aleksanyan, and Purukuru (2005) wrote a manual on cooperative learning strategies to spread international experience to Armenian classrooms. The main goal of the manual is to provide schools and universities with strategies to prepare preservice and in-service teachers for small-group differentiated instruction: specifically, cooperative learning. They argue that such new structured approaches are necessary for the Armenian education system to become more aligned with the latest international instructional approaches.

In addition, in her article titled 'Cooperative Teaching According to the Demand Curriculum,'

Apoyan (2014) emphasized that teaching can be a more productive process if students are instructed to work in groups, and student team achievement is greater as it relates to the different aspects of cooperative learning, e.g., the jigsaw technique.

Direct Instruction

The term *direct instruction* (DI) has been used in a generic manner for over 100 years to refer to any academic instruction led by the teacher. More recently, however, the term has been used to refer to a specific pattern of instruction that has been identified as effective in empirical studies. Developed by Engelmann and Becker (1977), the direct instruction model is based on the principles of explicit teaching, behavioral psychology and classroom management research (Becker, Engelmann, & Thomas, 1975a; 1975b). DI was originally focused on improving the academic achievement of economically disadvantaged youth in the United States. However, over the years, a substantial body of research has developed that indicates that this approach can be extremely effective with students with a variety of disabilities and those at risk for falling behind academically.

DI represents a highly structured approach to learning based upon behavioral principles, with an emphasis on high levels of academically engaged time, corrective feedback and learning to mastery through the use of small-group instruction. Although most often used at the kindergarten through Grade 6 level to teach basic skills in reading, writing and mathematics, the approach has also been found to be effective in providing instruction in advanced academic subjects as diverse as physics and philosophy. Based upon a longitudinal study of young, economically disadvantaged students, Becker and Engelmann (1978) also provided evidence that, when implemented with high fidelity, DI has a positive impact on a wide variety of affective outcomes.

Over the years, the DI approach to pedagogy has evolved and has led to the development of commercially available curricula in reading, math and other academic areas developed through extensive research on the teaching process (e.g., the DISTAR, Corrective Reading and Reading Mastery programs). Direct instruction approaches to classroom pedagogy, however, are often developed and implemented by teachers themselves, based upon the specific needs of the students they serve. These 'home-grown' approaches to direct instruction, often referred to using the lower-case acronym *di*, are based upon Engelmann and Becker's (1977) model, but tend to not have the same level of research to support them. At the current time, DI and di are used in thousands of schools in the United States as well as Canada, the UK and Australia (Binder & Watkins, 1990; Lockery & Maggs, 1982; Maggs & Maggs, 1979).

Principles underlying direct instruction. There are a number of basic principles underlying Engelmann and Becker's (1977) DI model. Two of the most important are that *all children can learn* if they are taught using the proper approaches and that *all teachers can be successful* if provided with the proper training and materials. The key, as Estrada (n.d.) suggested, is "If students do not learn the way we teach… we need to teach the way they learn." The DI model therefore places responsibility for student learning squarely on the shoulders of the teacher, eliminating failure being blamed on the student.

Because DI is intended to be used with students who are struggling academically, Engelmann and Becker made the point that students with special needs must be *taught at a faster rate* if they are to catch up to their higher-performing peers. DI sessions are therefore intensive, designed to support a student grasping critical concepts within a relatively short period of time. In order to achieve this goal, all features of *curriculum design and instructional delivery are controlled by the teacher* (or more accurately, by the curriculum). Maximizing teacher control is thought to minimize chances of students misinterpreting the information being taught and maximize the impact of instruction.

DI shares many features with task-analytic, behavioral approaches used by special educators. These include the use of structured curricular materials, immediate correction of incorrect responding, the importance of reinforcement of appropriate responding, the modeling and shaping of correct responses, the use of task analysis and the continuous assessment of student performance. DI, however, goes beyond teaching of rote skills, incorporating instruction with respect to problem-solving strategies, ongoing review of previously learned material and, at the group level, learning to mastery (see Carnine, 2000; Traub, 1999).

Marchand-Martella, Slocum, and Martella (2004) described DI as having three primary characteristics that are essential to high-fidelity delivery of the program. *Program design* involves a careful analysis of the content of what is taught so that skills are introduced in the order most easily learned and the probability of generalization of learning is increased. Closely associated with this aspect of the program is the careful sequencing of what is taught, taking into consideration what students are likely to already understand and building upon it, teaching easy to master skills before ones that are more difficult, providing instruction with respect to the prerequisites of a skill or strategy before attempting to teach the skill or strategy itself, and focusing first on instances consistent with rules that are being taught, holding off on instruction with respect to exceptions to the rule until the material being studied is better understood.

The *organization of instruction* involves decisions that are made with respect to 'how' instruction is delivered. When implementing

a DI program, students are taught in small groups of approximately 6–8 to ensure relative homogeneity with respect to current levels of skill and functioning in the specific subject area to be taught. Students may move from group to group as their skills increase and based upon the content of learning. Student engagement during instruction is maximized by using instructional approaches that keep students actively engaged and keeping lessons relatively short (15–20 minutes). Direct instruction also entails a continuous approach to assessment (formative assessment) so that student progress and instructional effectiveness can be closely monitored and this data can be used to support quality instructional decision-making. Curriculum-based measurement (Deno, 1988), in the form of progress monitoring, is the approach typically employed.

The third set of characteristics that differentiate DI from other forms of instruction is its focus on well-developed and carefully planned lessons that are designed around small learning increments and clearly defined and prescribed teaching tasks. Information is presented to students based upon available research in the topical area of interest in a carefully designed, structured manner. Lessons provide teachers with clear information, often in the form of scripts that provide instructors with detailed instruction with respect to what to say to students, how to say it, when to ask questions and how to correct incorrect responding via targeted feedback. The goal of this approach, which is based on the idea that all details of instruction must be controlled, is to provide students with clear instruction, regardless of who is teaching, with the goal of minimizing student misinterpretation.

Students who are recipients of DI-based instruction experience a decidedly different relationship with their teachers with respect to the frequency and types of interactions they experience. During DI lessons, teachers contin-uously engage students and carefully monitor their progress through asking questions to the small group, pairs of students and individual students, based on their mastery of the material being taught.

The DI process. Direct instruction lessons typically follow a specific pattern or process (*see Figure 1 on page 116*) that teachers follow through the use of 'scripts' that ensure consistency and minimize off-topic discussion. All lessons begin with a short statement of the *goals of the lesson* and a review of previous learning related to the topic of interest. New material is then presented in a series of *small subtasks* or *steps.* Each step is taught separately, with the components combined into a whole process only after the mastery of each step is demonstrated. *Detailed instructions and explanations* are provided, with teachers frequently *modeling and providing examples* of the behavior they are attempting to teach, often through the use of '*think aloud' strategies*. Instructors use prompts (e.g., cue cards) and ask a large number of questions to students, who respond in various groupings (as a whole group through choral responding, in pairs, and individually). This allows for a continuous check on understanding (Carnine, 2000; Engelmann & Carnine, 1991).

Students are provided with adequate practice opportunities and correction after each step that they are taught. During initial opportunities, they are *guided* to find the correct responses via *systematic feedback, prompts,* and *corrections*. Independent practice does not take place until all individuals in the group have demonstrated adequate levels of understanding (80% correct) in order to avoid students practicing incorrect responding. Progress is monitored continuously, even during independent seatwork, in an effort to diagnosis difficulties and intervene early when they are present (Rosenshine & Stevens, 1986). Each lesson is closed with a review of what was learned and a group assessment of whether the goals of the

lesson were met. This review not only focuses on the specifics of what has been taught but also upon their application in a variety of contexts.

In order to be most effective, direct instruction should be customized by targeting each particular student's prior knowledge (Wittwer & Renkl, 2008). Teachers need to assess what each student brings to the learning situation, taking into consideration what he or she is likely to already understand and building upon it. This information is critical if teachers are to effectively break down the information they are attempting to teach and present it at a level that all students in the small group will understand. It relates to one of the core concepts underlying the DI approach: *faultless communication*. This refers to the fact that what a student learns is a function of the communication they receive (i.e., instruction) and characteristics that the student brings to the educational context. When instruction is provided in such a way that it communicates a *single intended interpretation to the learner* (i.e., faultless instruction), then the probability of successful learning in dramatically increased (*see Figure 1 below*).

Figure 1. The Direct Instruction Process
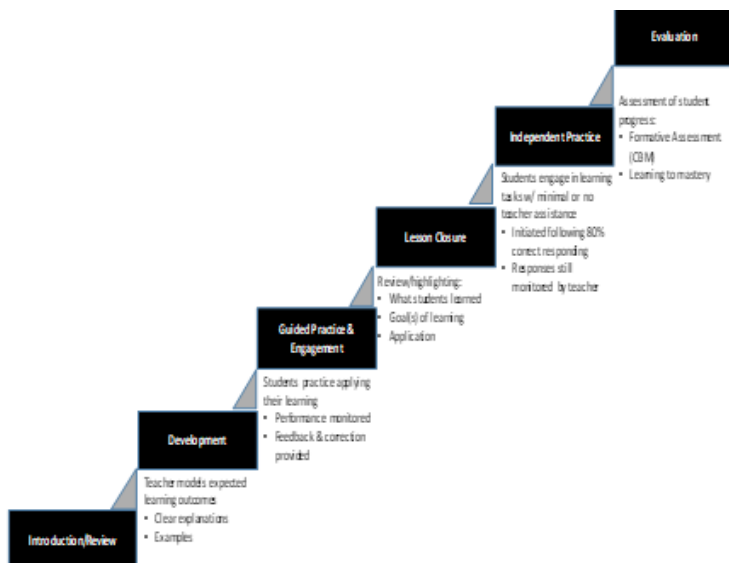
Supporting evidence. Since its introduction in the 1970s, direct instruction has been the focus of a tremendous number of studies that have attempted to determine both its effectiveness and its application for students who are not only struggling academically but also have disabilities. DI has been used in studies of reading comprehension and summarization (Berkowitz, 1986; Dermody, 1988; Grajia, 1988; Lonberger, 1988; Palincsar & Brown, 1983, 1989), to teach students to combine sentences (Hart, 1971), to develop 'process skills' (Deane, 1972), to develop test-taking strategies (Woodley, 1975) and to engage in reflective thinking (Readence & Bean, 1977). The approach has been proven useful to teach basic literacy and math skills to disadvantaged students from kindergarten (Gersten, Darch, & Gleason, 1988) through high school (Becker, 1977; Gersten, 1985; Gersten & Carnine, 1984; Gersten & Keating, 1987; Gurney, Gersten, Dimino, & Carnine, 1990; Rosenshine, 1979; Stebbins et al., 1977) as well as to enhance oral and written language comprehension (Lloyd, Cullinan, Heins, & Epstein, 1980). In all these studies, students who received direct instruction significantly outperformed students in the control group. Although initially assumed to be useful only in the development of basic academic skills, Khlar and Nigam (2004) have found it to have much more potential. Using DI and discovery learning approaches to instruction, they found that third and fourth grade science students exposed to a DI approach intended to help them develop procedures for designing and interpreting simple experiments and applying this skill to the evaluation of science fair posters did far better than their counterparts exposed to discovery learning.

Over the past two decades, there has also been a growing realization that DI principles and concepts can be of use for students with special education needs and, with the advent of response to intervention, can be used to sup-

port students to receive their instruction within inclusive settings (Bateman & Carnine, 1977; Bellamy, Horner, & Inman, 1979; Gersten & Maggs, 1982; Reith, Polsgrove, & Semmel, 1982; Stevens & Rosenshine, 1981). Numerous studies have indicated that a DI approach is useful in supporting a wide variety of students with disabilities to achieve at higher levels in reading, math and a number of other content areas (Binder & Watkins, 1990; Darch & Carnine, 1986; Gersten, 1985; Gurney, Gersten, Dimino, & Carnine, 1990; White, 1988).

In spite of the plethora of individual studies that have been undertaken indicating the effectiveness of DI, the most compelling evidence of the effectiveness of this approach has come from the series of research investigations that developed out of Project Follow Through. This educational research attempted to determine the best way to teach at-risk children from kindergarten through Grade 3, and over the course of a number of years compared 22 different models of instruction. Evaluation of the project occurred in 1977, nine years after the project began. Results indicated that students who received direct instruction had significantly higher academic achievement in reading, arithmetic, spelling and language than students in any of the other programs. Contrary to expectation, direct instruction improved students' higher-order cognitive skills significantly compared to the control groups and also showed the highest improvement in student self-esteem scores (Becker, 1978; Becker & Carnine, 1980; Becker & Engelmann, 1978; Becker & Gersten, 1982; Coombs, 1998).

Why does DI work? There are a number of reasons why teachers using the direct instruction approach and their students have proven to be so successful. Unlike the typical general education classroom, students are assessed before instruction using curriculum-based measures, and their skills levels are determined. Students are then instructed *at their skill level*

rather than the average skill level present in the class. Small-group learning is based on what is appropriate for specific students rather than grade-level expectations. The structure of DI is based upon *mastery of content*. Skills are gradually introduced, with only 10% of each lesson new material and with a significant amount of time devoted to review and application. All *details of instruction are controlled* to minimize the chance of students' misinterpreting information and to maximize the reinforcing effect of instruction. *Instruction is modified to accommodate each student's rate of learning,* with flexible grouping to ensure that each student advances to the levels at which he or she is able to add new skills to what is already possessed. Finally, DI is research based, with programs field tested and revised until available data indicate they are effective in supporting student learning.

Play-Based Strategies to Enhance Reading and Writing Skills

The final strategy introduced in this chapter is play-based strategy. This strategy is based on the fact that oral language is learned spontaneously in childhood, mostly by imitation, but that written language requires more specific education. For teaching students who struggle with written language, play-based strategies may be effective. Play-based strategies combine analytical and emotional learning by helping students to learn new skills while having fun in the classroom. When students participate in a play-based learning process, they tend to be more actively engaged than when teachers use more didactic strategies. This approach promotes better acquisition of the learning material and makes the process more interesting, accessible and effective. Play can help overcome difficulties that students may experience when they learn to read and write. The play approach is most applicable to younger students, but play components can be used for students of all ages and needs.

Play can intrinsically motivate children to learn through exploration of play materials such as blocks, a sand and water table, and props for dramatic play. Play may be used as a strategy for supporting literacy development. For children with and without special educational needs (preliminary and elementary school level), play is crucial, as it is a way for students to socialize and make sense of the world (Stewart, 2009).

An important condition for play-based strategies is the creation of a positive emotional environment for students. For example, Confucius said that the ideal learning condition is "when student and teacher are growing together." In order to be effective, learning games must be interesting for the teacher, so that he or she can transfer the positive attitude and atmosphere to the student. If the teacher is enthusiastic, it is likely that the student will enjoy the learning process also. It is important to encourage students by providing positive reinforcement to create an opportunity for success and for sustainable results.

Visual, auditory and tactile approaches; instruction in fine motor skills; visual spatial coordination and orientation; active attention; memory and other developed cognitive processes are necessary for successful learning of reading and writing. It is important for teachers to create opportunities for play situations by using as many of these approaches as possible. Every student has his or her own specific learning needs in reading and writing, so teachers must first assess and analyze student needs to create appropriate play situations using the different games and play exercises. Teachers also need to seize opportunities during the teaching process to incorporate play components to enhance student learning. Multiple studies conducted in Armenia demonstrate that play strategies promote independent learning (Paylozyan, 2007, 2017; Svajyan, 2007, 2012; Tadevosyan, 2012, 2013, 2016).

An example of play strategy is provided (*see Figure 2 below*). David has a problem with visual processing of printed material (letters, words). The play exercise is designed to develop his skills of combining letters into words. It can be implemented using a smartboard or cutout letters and shapes. First, the teacher prepares different shapes to fit with different letters. Each shape is assigned a letter. Then the teacher randomly arranges the shapes with letters. Next, the teacher asks the student either to assemble a specific word (e.g., *door*) or to make up their own word. Teachers can start with three-letter words and move toward longer words. The shapes are designed to assist the student with understanding that a letter can create different words when in different positions or places (e.g., *seal, sale; mile, lime*). At the end, the teacher and the student will count the number of correct words, and the teacher will praise the student. The counting provides an informal assessment of student progress, while the game provides an opportunity for the student to enjoy learning.

Figure 2. Example of a Letter/Word Play Strategy
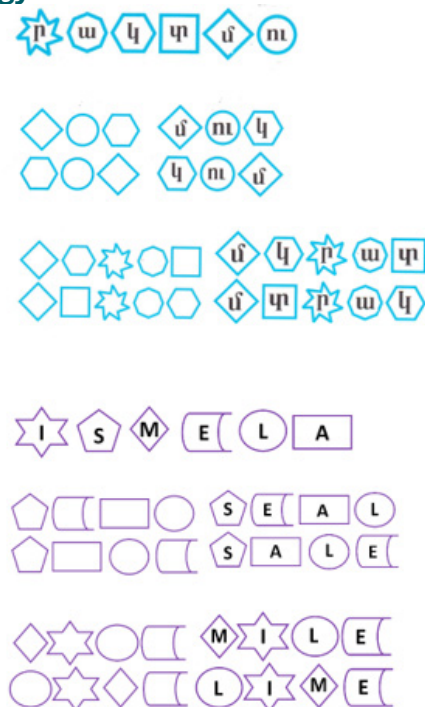
Conclusion

One of the critical components of successful inclusion is the use of concrete instructional strategies in classrooms and adequate professional development in the area. Without specific strategies and methodologies, it is very difficult for teachers to embrace inclusion as a concept that can be realistically implemented in schools. The goal of this chapter is to present readers with three widely used evidence-based strategies that have been demonstrated to facilitate inclusion in U.S. schools, and one that has been used widely in Armenia. Each of the strategies was specifically selected to cover core instruction for the whole class (cooperative learning), enhanced reading instruction conducted in pairs of students (PALS) and small-group instruction for students who significantly lag behind their peers (DI) or who lack motivation (play-based strategies).

Tips for Teachers

- Assume that all students can learn: They just need appropriate instruction designed to address their specific needs.

- Differentiated instruction takes more preparation time, but leads to students who are engaged in learning and have better educational outcomes.

- Create both homogeneous and heterogeneous small groups to directly teach content and to provide students with opportunities to learn from one another.

- Implement all components of PALS with fidelity. PALS comes with a manual (http://vkc.mc.vanderbilt.edu/pals/) that includes scripted lessons to teach students how to implement all the procedures and materials to support each activity.

- Reinforce positive reading and coaching behaviors.

- Adapt instruction to the backgrounds of learners. Every student comes to a classroom with his or her own reserve of prior knowledge on the subject at hand. It is critical that teachers target this zone, so as to not overwhelm students. Providing too little or too much explanation can actually interfere with learning.

- Strike a balance between direct instruction and other forms of learning. The most effective teachers strike a balance between directive and nondirective instruction. Use the former to teach students those skills that they need to fully master in order to process the curriculum.

- When a student is experiencing a learning problem, it is the teacher's responsibility to use a play component or strategy to make their learning more effective.

Thoughts for Leaders

- Provide professional development and necessary materials for educators to be able to teach all students.

- The presented strategies can make the learning environment more active and noisy. This just means that students are engaged in and enjoying the learning process.

- Research is needed to evaluate the effectiveness of strategies for differentiated instruction in Armenia.

- Teachers from different classes need to work together so that one is free to undertake small-group instruction while the other attends to the larger group of students. Otherwise, specialists with the training and flexibility to assist classroom teachers in this endeavor will need to be provided.

Reflection Questions

- How would you adapt the three presented strategies in your classroom?
- What components of the presented strategies would you find the easiest, and the most difficult, to implement?
- What tips for educators would you add based on your experience?
- Which strategy presented in this chapter would you use in an inclusive classroom?

Additional Resources

Webinar on Peer Assisted Learning Strategies (PALS; 2018). Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Learning module on Instructional Strategies (2018). Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Glossary

Collaborative learning — Students actively working together in groups to understand a topic or concept.

Cooperative learning — A learning strategy where students work in small groups with a specific set of procedures —

Student team achievement division (STAD), where students work as teams to master the objective and each student's test score is averaged for the team;

In a jigsaw procedure, each group member learns an essential part of the topic by working with an expert group and then returns to the home group where the members work together to combine the knowledge to complete the task;

Team-accelerated instruction (TAI) is used in math, where students receive instruction on the topic from the teacher in small homogeneous teaching groups. Students then practice the skills in small heterogeneous learning teams at their own pace using materials appropriate to their specific needs;

The three-step interview strategy — Helps to develop student note-taking skills and the ability to share information with others.

Differentiated instruction — Classroom instruction responsive to student learning needs, typically conducted in small groups.

Direct instruction — An explicit teaching method that uses behavioral psychology and classroom management research strategies designed to address learning needs of students with disabilities and special needs.

Homogeneous and heterogeneous groups — Instructional groupings to place students with either similar or diverse learning needs together for teaching and learning.

Peer-assisted learning strategies (PALS) — A research-based teaching classroom strategy that engages all students to work together in pairs (weaker and stronger reader) to improve their reading skills. It includes —

- Partner Reading: Students read together in pairs based on their reading skills for five minutes each. Student who is not reading follows along and provides feedback;
- Retell: Students paraphrase what they read to each other for three minutes each;
- Paragraph Shrinking: Students summarize what they have read to each other for five minutes each;
- Prediction Relay: Based on what they read, students predict what will happen next for five minutes each.

In all the activities, the student who is not reading or retelling follows along and provides feedback to the other student.

Play-based learning strategy — Teaching strategy that combines analytical and emotional learning by helping students learn new skills, including reading and math, while having fun in the classroom.

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CHAPTER 9:

Transition to Adulthood for Youth with Disabilities

Erik W. Carter, Vanderbilt University, Tennessee
Tereza Azatyan & Marianna Harutyunyan, Armenian State Pedagogical University

Youth with disabilities need strong transition and educational services during adolescence. This chapter addresses the skills, instruction, experiences, supports, and relationships that can help them achieve their goals for adulthood.

Before reading this chapter, ask yourself the following —
- What does it mean to 'transition' to adulthood?
- How is transition part of the educational process in the United States?
- What is the importance of planning for transition?
- In what ways can transition plans be individualized?
- What are the academic and employment considerations for transition? How are these organized?

Introduction

The transition to adulthood is a period of change and opportunity for every young person. As students enter adolescence and move into early adulthood, they encounter increasing expectations for independence, self-direction and autonomy. These years are marked by rapid physical, emotional, social and cognitive growth. And they are accompanied by a range of new experiences, relationships and learning opportunities. Most of all, it is a time when young people begin to identify their own vision of a 'good life' in adulthood and take steps to move toward that vision.

Yet for far too many young adults with disabilities, their goals for life after high school do not materialize. Studies carried out across countries tend to highlight two persistent gaps. The first gap is between the outcomes of students with disabilities and those of their peers without disabilities. Across many areas of life — employment, college completion, community involvement, residential life and personal independence — students with disabilities tend to fare much more poorly than their classmates in the early years after exiting school. The experiences and outcomes considered normative in a particular community may end up out of reach for students with disabilities.

The second gap is between the aspirations of students with disabilities and the outcomes they attain. In other words, the dreams and goals students have for their own lives may not come to pass in the early years after leaving secondary school. Fortunately, there are effective practices and partnerships that can be put in place to bridge both of these gaps for students with disabilities.

A primary purpose of transition planning and education is to equip young people with the skills, experiences, supports and relationships they need to pursue (and obtain) their goals for life after high school. Within the Armenian context, this planning has only really happened when youth are no longer in school. Unfortunately, insufficient attention has been paid to the future education and career planning of these students. Moreover, the challenges young people with developmental disabilities face in the areas of career counseling and career planning exist at practice-ethical, scientific and methodological levels. From this perspective, many youths with disabilities and their families lack the knowledge, skills and information they need — as well as access to professional trainings in their regions — to prepare for future employment opportunities.

The research project Education Transition for Children with Disabilities in Armenia conducted by the Bridge of Hope in 2015 emphasized that the issue of transition should be brought onto the agenda of policy makers and should be a particular focus of attention for implementers at all levels in the educational system. If shared, these ideas could support better service provision for children and youth with disabilities within the school as well as

after graduation. Lack of services and information seems the primary obstacle for promoting best practice ideas on transition.

When secondary schools — in collaboration with families, disability agencies and community members — provide the right combination of instruction, opportunities, assistance and linkages over time, the trajectories of students with disabilities can change in positive and powerful ways (Carter, Austin, & Trainor, 2012; Mazzotti et al., 2016). In an increasing number of countries, attention to transition is formalized — whether nationally or locally — within the policies and practices of schools. In the United States, transition is formally mandated and defined as a coordinated set of activities that are —

- Designed to be within a results-oriented process, focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;

- Based on the individual child's needs, taking into account the child's strengths, preferences, and interests and

- Include instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation. (IDEA, 2004, § 602.34)

Indeed, the extent to which focused and sustained attention is directed toward the plans and pathways of students, the more likely students are to experience their own vision of a 'good life.'

This chapter highlights best practices related to supporting successful transitions for youth

with disabilities. Although the field of transition is still relatively new in most countries, research carried out around the world is beginning to coalesce into a set of promising practices. In Armenia, transition is viewed as an issue that needs to be addressed with the participation of educational and social support sectors. But presently, youth with disabilities who receive services from the social sector are not receiving sufficient and individualized support that meets their needs. The chapter presents an overview of the following key areas for consideration: transition planning, transition assessment, academic preparation, employment preparation, community experiences, functional skills, peer relationships and community partnerships. In each area, discussion on why a particular area warrants attention, strategies that align with best practices, and a description about who should have primary responsibility for the strategy will be provided (Carter, 2018a,b; Hughes & Carter, 2012; Wehmeyer & Webb, 2012).

Transition Planning

A well-crafted transition plan provides the foundation for effective transition services and supports. In the United States, schools are required to begin discussing the transition needs of students no later than age 14 and to begin formal planning no later than age 16. A written transition plan identifies a student's post-school goals for life after high school and is updated annually. All other aspects of the transition plan are essentially aimed toward these post-school goals. In addition, a strong transition plan identifies the specific skills, supports, services and linkages that will be delivered throughout the student's schooling and that will put the student in the best position to achieve his or her post-school goals. In other words, the instruction and experiences students receive in the upcoming school year should aim directly toward their post-graduation plans. Although most of these transition

activities will be organized or delivered by schools, other disability agencies can also be asked to assist in implementing aspects of the plan. For example, some employment assistance could be provided by an agency that will later work with students after they graduate.

A strong transition plan should include several key elements, according to the National Technical Assistance Center on Transition (2012) —

- Appropriate measurable postsecondary goals in relevant areas (e.g., employment, further education, community participation, independent living skills);
- Evidence that the postsecondary goals are updated each year;
- Evidence that the postsecondary goals are informed by the findings of quality transition assessments;
- Transition services — provided by the school or other agencies — that will reasonably enable students to meet their postsecondary goals;
- A course of study (i.e., sequence of classes) that will reasonably enable students to meet their postsecondary goals;
- Annual goals that are related to the transition services needs of students.

It is widely recommended that transition planning begins early (typically by the start of high school), is revisited annually, and becomes more focused as students approach graduation and have a clearer sense of what they want to do after graduation. The post-school goals of students are likely to evolve over time as they gain new experiences, learn new skills, and meet new people. Therefore, it is important that plans not be treated as static documents, but rather updated on a regular basis.

A collaborative, interdisciplinary planning team convened by the school will be essential to developing and implementing an effective transition plan. This team should include general and special educators, school administrators, relevant related service providers (e.g., occupational therapists, speech-language therapists), and other professionals from the community (e.g., vocational rehabilitation, residential providers) who collectively bring the expertise and services students will need to identify and achieve their goals. Inviting representatives of agencies, organizations and programs from the community that a student might access (before or after graduation) can help promote more seamless transitions. In addition to these professionals, the active involvement of families is invaluable. Parents typically know their children better than anyone else and will be an enduring source of support during the transition process and throughout adulthood. Encouraging their involvement in planning both ensures their unique perspectives are heard and informs parents about available resources for their children. Finally, students with disabilities should be an active part of the transition planning process. In addition to being present at their planning meeting, a growing number of students are taking a more active role in leading aspects of this meeting (e.g., sharing their personal goals for adulthood; talking about their interests, preferences, strengths and needs; asking for feedback on their progress; introducing team members). In the United States, students must be invited to transition planning meetings, and they are encouraged to be present for all aspects of the conversation that relate to their future goals. Such involvement can help them learn valuable self-advocacy and leadership skills for the future.

Transition Assessment

It is important to emphasize the considerable diversity that exists among adolescents with disabilities. Not only do students vary widely in the ways in which their disabilities impact their learning and living, but they also differ in the goals they have for adulthood, the supports

available in their homes and communities and the strengths and passions they possess. No two students are quite alike, and a disability diagnosis alone does not provide sufficient information to craft a strong transition plan. In other words, every transition plan should be individualized for every student. Transition assessment provides a formal way for planning teams to determine what instruction, experiences and supports will be most valuable for a particular student. It also enables teams to gauge the progress a student is making each year.

Transition assessment is defined as 'collecting information on the student's *strengths*, *needs*, *preferences*, and *interests* as they relate to the demands of current and future living, learning, and working environments' (italics added; Sitlington, Neubert, & Leconte, 1997, p. 70). Each of these four areas of assessment is critical. Knowledge of one's strengths can open up doors to the workplace and other community activities, identification of needs can lead to instruction or support, and awareness of one's preferences and interests helps ensure goals are meaningful and motivating. Within this broad range of 'living, learning and working' domains, assessments can be used to explore areas such as community living, employment, postsecondary education, community participation, financial literacy, health, leisure/recreation, quality of life, self-determination, social skills, technology skills and transportation skills. In the United States, the suitability of post-school goals is ensured by requiring the use of age-appropriate transition assessments.

Carefully obtaining assessment information across relevant areas gives planning teams the information they need to individually align the services and supports provided to a particular student. Different members of the team can help gather assessment information. For example, a general educator might provide information about a student's academic needs and strengths, a guidance counselor might provide insights into the student's career interests, parents might provide information about their child's independent living skills and a vocational rehabilitation counselor might provide information about the student's work skills. To gather such information, planning teams can use a combination of informal and formal assessment approaches. For example, standardized tests, curriculum-based assessments, situational or performance assessments, ecological inventories or task analyses, direct observations, interest inventories or preference assessments, checklists or rating scales, surveys or questionnaires, interviews, teacher-made assessments and person-centered planning processes can all be drawn upon by transition team members. The assessment findings can be shared with the transition team verbally and in written form, differences of opinion can be discussed, and relevant information can be incorporated into the written plan. Although assessments should be completed in advance of the transition planning meeting, it is recommended that the assessment process be ongoing and be updated each year as needed.

In Armenia, some of the tools described above are incorporated into formal assessment systems. In addition, by the decision of the Government of the Republic of Armenia on 9 January 2014, the concept of person's comprehensive evaluation based on the principles of the World Health Organization's International Classification of Function (WHO ICF) for disability determination was approved (Harutyunyan, 2017). Presently, a new approach for disability determination based on the WHO ICF ranges is being adopted in Armenia and implemented by the Agency of Medical and Social Expertise — the body that is responsible for identifying disability status of persons in the country. The ICF includes the following areas for assessment and evaluation: body structure, body function, activity and participation as well as

environmental factors. Assessment of activity and participation of youth with disability and environmental factors will help to organize the assessment process through collecting information on the student's *strengths*, *needs*, *preferences*, and *interests,* and person-centered planning for organizing transition according to the demands of current and future living, learning and working environments for youth with disability. Although the ICF provides data on individuals' strengths, needs, preferences and interests, support teams for students with disabilities will need to ensure that such data can be specifically applied to transition planning. Such planning further requires that students receive preparatory instruction in a variety of domains related to academics, employment and living in the community. Such preparation is described in the paragraphs below.

Academic Preparation

Adolescents with disabilities should have access to rigorous instruction in a sequence of classes that will provide them with academic preparation for their future careers. Although students with disabilities often enroll in both inclusive and specialized courses, current research highlights the importance of supporting students to access to the general curriculum alongside their peers. In other words, well-supported involvement in the same breadth of academic, elective and other courses available to any other student in a high school is considered the preferred option for students with disabilities. Such courses typically are taught by content experts (i.e., classrooms teachers with training in the area in which they are teaching), reflect higher expectations, lead to meaningful completion options and provide opportunities for students to learn alongside and meet their same-age peers without similar disabilities. Follow-up studies of students with disabilities have found that spending more time in inclusive classrooms during high school is predic-

tive of better employment and postsecondary education outcomes after leaving high school (Mazzotti et al., 2016). Unfortunately, in many countries around the world, the involvement of students with disabilities in inclusive classrooms tends to become more limited as they move through secondary school.

The course of study a student follows should help lead them toward their post-school goals. This course of study is developed at the transition planning meeting, and a student's schedule is set to match this sequence of classes. For example, students with disabilities who are interested in continuing on to college may need to obtain a particular type of diploma in order to gain admission. Likewise, students interested in entering a particular trade may need certain classes in order to obtain the foundational skills and knowledge required for that profession. Decisions about course pathways are driven in many ways by the expectations that educators, families and students themselves hold. For example, views regarding a student's career and college prospects will inevitably shape decisions about the coursework, academic supports and supplemental services the student will receive. Therefore, it is important that low expectations not lead planning teams to choose courses of study that have few prospects of leading to good outcomes.

In addition to reflecting on *where* students with disabilities should learn, it also is important to consider *how* they will be supported to access the instruction that takes place in their classrooms. Research on inclusive schooling suggests learning may be enhanced for students with disabilities in classrooms that —

- Adopt principles of universal design for learning,
- Involve strong collaborations between general and special educators,
- Provide students the accommodations and modifications they need,

- Incorporate collaborative learning and peer-mediated supports,
- Use positive and proactive behavioral supports and
- Use high-quality instruction (Carter & Draper, 2010).

In addition, students can be taught academic self-management strategies (e.g., choice making, goal setting, self-management, self-evaluation) that can increase their independence and self-determination in the classroom. For example, students should learn to keep track of their assignments, set personal learning goals and speak up for their needs. As students learn more about the supports and strategies that enhance their learning, they are also identifying strategies they can take with them into postsecondary education.

Employment Preparation

For most students with disabilities, the primary aim of their education — whether immediately after high school or at the conclusion of college — is finding a meaningful job. In the United States, this goal is named as one of the primary purposes of special education — which is described in law as preparing students 'for further education, employment and independent living.' The right job offers much more than a regular paycheck; it creates connections to the community, places people with disabilities in valued roles, enables them to contribute to the needs of others and brings a sense of personal satisfaction. Conversely, the absence of work can lead to poverty, social isolation and a diminished quality of life. Although most students with disabilities have goals for obtaining a job in the future, underemployment and unemployment continue to mark the experiences of many young adults with disabilities in the early years after graduation.

High school is a time when all students with disabilities should participate in work-related instruction and experiences that teach them important occupational skills and values, expose them to career possibilities, inform their career decision-making and help them build strong resumes (Carter, Trainor, Cakiroglu, Swedeen, & Owens, 2010). These experiences can be especially valuable for students with cognitive impairments, who may require more time and instruction to prepare for future roles in the workforce. For example, students might build their career awareness by completing career interest and aptitude assessments, accessing career or job counseling or developing a written career plan. They might explore different career pathways by taking tours of various businesses, participating in a short-term job-shadowing experience, attending school-sponsored job fairs, visiting a local career resource center, taking occupational courses or listening to guest speakers from local businesses. Finally, they might gain hands-on work experiences by participating in an internship, apprenticeship, school-based enterprise or after-school job. Although the most important combination of experiences will vary from one student to the next, research suggests that having hands-on work experiences in the community can be especially powerful for students with more severe disabilities. Indeed, students with disabilities who leave school with at least one paid work experience are significantly more likely to report having a paid job in the first few years after leaving high school (Carter et al., 2012; Mazzotti et al., 2016). Some students with disabilities could find their jobs through existing vocational programs at their school that serve students without disabilities; others may need help from a special education teacher, an outside employment agency, or their family.

This collection of work-related experiences can provide students with multiple opportunities to learn and practice those skills and attitudes considered attractive to future em-

ployers. Several studies have sought to identify the types of skills valued most by employers (e.g., Carter & Wehby, 2003; Ju, Zhang, & Pacha, 2012). These tend to fall into four categories —

1. Task-related social behaviors,
2. Non-task-related social behaviors,
3. Work performance behaviors and
4. General work behaviors.

Task-related social behaviors (i.e., interactive behaviors that are directly related to the performance of job tasks) include following directions, accepting constructive criticism from a supervisor, asking for explanations when instructions are unclear and requesting assistance when needed.

Non-task-related behaviors (i.e., interactive behaviors not directly related to task performance, but that may contribute to social integration and acceptance) include using social amenities (e.g., please, thank you), using appropriate conversational behaviors (e.g., making eye contact, appropriate volume), and responding appropriately to joking or humor. Work performance behaviors (i.e., nonsocial behaviors related to employee productivity) include carrying out instructions that need immediate attention, working continuously without getting distracted and working at the expected speed. General work behaviors (i.e., generic behaviors with relevance across a wide variety of entry-level jobs) include returning from break or lunch on time, requesting days off work and calling into work when sick or running late. One explanation for high rates of job turnover or termination among some young people with disabilities may be that they perform poorly with those skills judged to be most critical to job success by their employers. Thus, it is advised that students receive multiple opportunities to learn and practice employment skills at school and on the job (Gilson, Carter, & Biggs, 2017). For example, students could be given opportunities to assist in the school's office,

cafeteria, library or school store as a way of learning these vocational skills without leaving the campus.

Community Experiences

When students graduate, their daily activities and social opportunities shift outside the walls of the school. Preparing students with disabilities to assume active roles in their community is an important aspect of preparing them for adulthood. Students should leave high school with a sense of the types of recreation, leisure, civic and other community activities that are available locally; preferences for how they would like to be involved in these activities; and the skills needed to participate in active and enjoyable ways. Participation in extracurricular clubs, school-sponsored groups, service learning experiences and other volunteer activities provides ways for students to gain this exposure and develop relevant skills. Involvement in activities beyond the classroom gives students a way of discovering new interests and talents; provides opportunities to meet new people who share similar interests; connects them to valued roles where they can contribute to the needs of others; and helps students learn recreational, social, self-determination and everyday life skills in more authentic environments. Aligning these out-of-classroom activities with students' personal interests can be one way of building motivation and maximizing their engagement in learning. Planning for extracurricular involvement should be an explicit part of the transition planning process. Likewise, it will be important to address issues related to transportation, supports and communication with families so that students can participate meaningfully.

For some students with more severe disabilities, receiving at least some of their instruction in the community can be especially valuable (Bouck & Carter, in press). In other words, schools provide some instruction off campus

in the community settings in which students would be expected to ultimately use the skills they are learning. For example, instead of teaching a student to use money or make change in the classroom, they would be taught to do so at an actual business when purchasing real items. For students who have difficulty generalizing what they learn in the classroom to everyday life, regular opportunities (e.g., daily, weekly) to practice life skills in real-life settings can solidify learning. For example, students might be taught to use public transportation, to shop at local stores, to find help when they are lost, to handle their banking or to participate in recreational activities. When planning community-based instruction, teachers select a range of relevant community locations that represent the types of skills and routines students will need to perform to participate actively in their community.

Residential and Daily Living Skills

In addition to an emphasis on academics and employment, the secondary school curriculum should also address skills that will enable students with disabilities to live in and enjoy their communities. Although many young people with disabilities will learn these everyday life skills at home or elsewhere in their community, some students with more severe disabilities will benefit from explicit instruction and practice opportunities related to skills not traditionally captured in their coursework. For example, instruction might focus on areas like cooking, grooming, self-care, money management, shopping, using a computer, leisure activities and functional academics (e.g., reading, math). Classroom teachers can use systematic instruction to teach these skills at school, and families can be shown how to teach these skills at home.

Peer Relationships

Adolescence is an especially important period of social development. Indeed, most memories about secondary school center on the relationships students have, the friendships they form and the things they do with others. Through their relationships with their peers, students learn peer norms and values; develop a better sense of who they are; exchange social, emotional and other practical supports; learn a wide range of social, academic, leisure and self-determination skills and, most importantly, experience a sense of belonging. Yet forming and maintaining these relationships can become especially challenging for students with disabilities during adolescence. Peer group affiliations take on greater importance, social interactions increasingly take place outside the presence of adults, and the ways and contexts in which students connect with one another increase in complexity. Some students with disabilities struggle to develop these important peer relationships; others struggle to relate to peers in positive and prosocial ways (Carter, 2018b).

Peer-mediated interventions offer one way to create regular opportunities for students with and without disabilities to interact with and learn alongside one another within the classroom or elsewhere during the school day. These interventions involve teaching one or more peers to provide targeted social, behavioral or academic assistance to students with disabilities with guidance and support from teachers, paraprofessionals, counselors or other school staff (Carter, Biggs, & Blustein, 2016). Such approaches have been shown to substantially increase the learning of students with disabilities, the interactions that take place among all participating students, and the relationships that subsequently develop.

Peer support arrangements. These involve equipping one or more peers to provide ongoing academic and/or social support to their

classmate with a disability throughout the semester as they work together on activities designed for all students by the classroom teacher (Carter, 2017). Peers are recruited from within the same classroom, participate in an initial training, provide individualized supports listed in a written plan and receive ongoing feedback from paraprofessionals or teachers as they assist their classmate. Socially, peers increase opportunities to contribute to task- and social-related discussions in the classroom, model age-appropriate social and communication skills and help diminish attitudinal barriers. Academically, working alongside peers increases the amount of corrective feedback, individualized supports, and response opportunities students with disabilities receive.

Peer network meetings. These involve forming a cohesive social group for a student with a disability that meets throughout the semester or school year (Asmus et al., 2017). With input from the student, teachers decide upon the focus and format of the network as well as which peers to invite. A group of three to six peers — usually schoolmates who have common interests or experiences — is invited to an initial orientation meeting. At first, an adult leads the weekly network meetings in which students participate in a shared activity (e.g., eating lunch, playing a game), discuss times to connect with one another socially throughout the week (e.g., between classes, before or after school, during breaks or lunch), and brainstorm ideas for involving the focus student with a disability more fully in the life of the school. Over time, the adult takes a background role as peers take responsibility for organizing and running weekly network meetings.

Peer partner programs. These involve regular, group-based social opportunities within specialized or self-contained school settings (Hughes & Carter, 2008). They differ in their focus on creating opportunities for groups of students with and without disabilities to spend time together. Their common feature is the structuring of regular interaction opportunities for students under the guidance of special education staff. Peer partner programs are most often implemented as a 'reverse-mainstreaming' approach delivered within special education classrooms. Peers participate in an initial training, provide academic assistance or social support to various students throughout the semester and complete required assignments and reflections on their experiences. Other schools establish more episodic groups that meet weekly or monthly for social- and/or service-focused activities.

Community Partnerships

The extent to which students, their families, and schools develop strong relationships and partnerships with any outside agencies and organizations that also serve people with disabilities can help create more seamless connections between school services and adult services. Best practices in transition emphasize the need for a coordinated set of services that bring together essential services from multiple governmental and nongovernmental organizations and agencies in the community (Noonan, Morningstar, & Erickson, 2008). Transition plans should describe the ways in which employment programs, residential providers, mental health services, behavioral support programs, postsecondary educational programs and other available community services can work together to support the movement of students to their desired post-school activities. Inviting representatives of these program to transition meetings can be a helpful way of making sure students and families know about the range of available services that might meet their needs — both now and in the future. A common concern shared by parents is the difficulties they have understanding and using a very complex service system.

Access to formal programs designed specifically for people with disabilities is important,

but schools should also encourage connections to supports that would be available to anyone in the community, whether or not they have a disability. For example, schools that establish relationships with local businesses and employer networks; community organizations that address housing, employment, health, and other needs; civic groups; community leaders; and other organizations that serve a local community end up having access to a much richer and wider range of supports that could be helpful to students with disabilities and their families.

To increase knowledge about and access to the wide range of available formal and informal supports, schools sometimes establish transition teams. Such teams create a map of all the available resources in a local community that could be drawn upon by students with disabilities and their families. They also meet to identify ways to better coordinate available services and address gaps in needed resources. Another promising approach schools can use to identify new partners to address the transition needs of students with disabilities is called a *community conversation* (Carter & Bumble, 2018). These structured community events bring together a cross-section of diverse community members (e.g., civic leaders, disability professionals, educators, employers, individuals with disabilities, parents). Attendees participate in three rounds of small-group conversations during which they identify resources, ideas and personal connections that could be drawn upon to support transitions for students with disabilities in the community. The event culminates with a whole-group discussion in which everyone shares and prioritizes the most actionable and promising strategies they heard. The ideas generated over the course of the event provide a menu of potential pathways and partners in the community that can be drawn upon to assist transition-age students with disabilities.

Challenges in Transition

Delivering high-quality transition services is not without substantial challenges. First, good transition services require strong collaborations that extend beyond the involvement of schools alone. Whether or not a student with a disability gains employment after high school is impacted by many factors. Schools must provide excellent instruction related to employment, employers must be willing to hire people with disabilities, disability support agencies and organizations must commit to providing any needed on-the-job support, families must expect and support their child's employment and transportation must be available to get to and from work. At the local level, communities must find ways of working together to make sure students with disabilities have the opportunities and supports they need, as well as determine where gaps in opportunities and supports need to be addressed. Second, transition is a relatively new area of emphasis in most countries. In the United States, transition services were not formally mandated until 1990. As a result, many educators may not feel prepared to address such a broad range of needs that extend beyond academics. Efforts should be made to provide preservice and in-service training so that educators understand the importance of transition and are familiar with best practices. Third, it is important to develop strong laws and policies related to transition. Foundational practices like transition planning, transition assessment, academic inclusion and employment preparation should be formalized so that every student with a disability has access to these research-based practices. In the midst of a crowded secondary school curriculum, transition needs are unlikely to be addressed effectively unless clear mandates are communicated. Fourth, low expectations continue to be a barrier to good outcomes for students with disabilities. High expectations for work, college enrollment and community participation

are important and should be reflected in laws, policies and practices. In addition, investments should be made to raise awareness about and attitudes toward students with disabilities in schools and communities.

Summary

Improving the outcomes that students with disabilities experience during and after high school is the primary purpose of transition education. The right combination of services and supports can change the post-school pathways of students in noticeable and lasting ways. As educators and professionals, the expectations we hold, the practices we implement and the partnerships we develop can ensure students leave school with high aspirations, strong skills, relevant experiences and needed relationships.

Opportunities for a successful transition should be available in every country, as youth with disabilities need to develop their daily living, communication, relationship, academic and employment skills throughout their lives. In Armenia, youth with disabilities have an individual rehabilitation plan, which is provided by the Agency of Medical and Social Expertise, functioning within the framework of the Ministry of Labor and Social Affairs. A first step toward transition planning in Armenia is an acceptance of the rationale for such planning by government agencies. Afterwards, there need to be eligible bodies and organizations that will be responsible for the provision of sufficient services in order to make the transition to adulthood successful and reachable for youth with disabilities. All the reforms conducted in this field regarding implementation of WHO ICF as a national standard can act as driving and enabling factors within the context of transition. For example, ICF information on things like strengths and preferences can be leveraged and applied to individual transition plans as students reach higher grades in school. Although transition planning begins at age 14 in the United States, it may need to begin sooner in Armenia as children transition out of primary schooling into secondary schools, vocational schools or work experiences.

Case Study: Ethan

Although he was 16 years old, Ethan still wasn't sure what he wanted to do after high school. As a student with a mild cognitive disability, he had been given few opportunities to learn about jobs in his community, and his school provided little instruction on how to find and keep a job. A transition planning team comprised of several teachers, therapists, agency staff and his parents completed a series of transition assessments in order to learn about Ethan's vocational interests and preferences, as well as to identify his career-related strengths and needs in this area. By helping Ethan visit some local businesses, talk to employers, and try out different jobs over the school year, Ethan discovered he loved working with children. The team helped Ethan identify his post-school goal as working in a preschool as a teacher's assistant, and they developed a written plan for how the school could help prepare him for this role. Over the next two years, he volunteered at local childcare centers and learned the different social and vocational skills he would need to be successful at this type of job. These experiences helped him develop a strong resume and gain more confidence in his abilities. During his final year of high school, a local employment agency helped him find a paid job at a nearby preschool program, and they provided on-the-job supports until Ethan could do the job independently.

Tips for Teachers

- When planning for transition, identify strengths, preferences and needs of students;
- Create opportunities for students with disabilities to use their abilities while performing different work-related, academic and social tasks in schools;
- Include specialists based on each student's individual needs in students' transition plans;
- Collaborate with different organizations that may help the student transition to community life;
- Use strategies and select tools that facilitate a student's engagement in a particular activity and enable effective collaboration.

Thoughts for Leaders

- Provide support for all governmental and nongovernmental structures that focus on transition.
- Create workplaces and collaborate with employees to support youth with disabilities, especially in relation to transition.
- Suggest information sessions for families who have youth with disabilities, describing their possibilities and places that can support successful transition.

Additional Resources

Autistic Self-Advocacy Network. *The transition to adulthood for youth with ID/DD.* http://autisticadvocacy.org/wp-content/uploads/2013/12/HealthCareTransition_ASAN_PolicyBrief_r2.pdf

Federal Partners in Transition. *What to know about youth transition services for students and youth with disabilities.* https://www2.ed.gov/about/offices/list/osers/transition/products/fpt-fact-sheet-transitionservices-swd-ywd-3-9-2016.pdf

Network on transitions to adulthood. *Moving into adulthood for youth with disabilities.* https://www.nhchc.org/wp-content/uploads/2011/10/youthdisabilities.pdf

Pandey, S., & Argarwal, S., *Transition to adulthood for youth with disability . . .* http://iosr-journals.org/iosr-jhss/papers/Vol17-issue3/I01734145.pdf

Simon Fraser Society for Community Living. *Transition to adulthood.* http://www.inclusionbc.org/sites/default/files/Transition-to-Adulthood-handbk-May12.pdf

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Glossary

Interest — The feeling of wanting to know or learn about something or someone.

Need — Something that is necessary for an organism to live a healthy life; it arouses an organism to action toward a goal, giving purpose and direction to behavior.

Preference — A greater liking for one alternative over another or others.

Strength — The quality or state of being strong: capacity for exertion or endurance.

Transition — The process or period of changing from one state or condition to another.

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CHAPTER 10:

The Role of Augmentative and Alternative Communication (AAC) in Inclusive Education

Marietta N. Janecky, Holland Center, Minnesota
Armenuhi Avagyan & Marine Marutyan, Armenian State Pedagogical University

This chapter discusses the use of alternative and augmentative forms of communication for students with disabilities. Outlined is how to select a form of communication based on student profile and how to teach using effective teaching procedures.

Before reading this chapter, ask yourself the following —
- What is the profile of a student who would be an appropriate user of an alternative form of communication?
- What are the difficulties associated with understanding the communication of a student who uses an alternative form of communication?
- Will using an alternative communication methodology be an obstacle for verbal communication?
- Will the native language of the student (i.e., grammatical structure, syntax) present an obstacle if alternative communication is used?

Introduction

This chapter will touch upon the effective application of alternative communication methods when working with children with speech and communication difficulties. We will focus specifically on the application of alternative communication methods for children diagnosed with autism and children with visual impairments.

Worldwide, the number of children with autism spectrum disorder (ASD) is increasing (Christensen et al., 2016). According to the World Health Organization, the epidemiology of ASD worldwide is 1 in 160 children (*Autism Spectrum Disorders: Fact Sheet*, 2017). This statistic is an average estimate of ASD prevalence, as prevalence varies across studies. In addition, some well-controlled studies have reported substantially higher rates via longitudinal research studies. The prevalence of ASD in many low- and middle-income countries is mostly unknown.

Children with a diagnosis of ASD exhibit persistent deficits in communication and social interaction, as well as restricted and repetitive patterns of behavior. These characteristics often result in significant impairments in socialization, adaptive behavior, speech and communication development (American Psychiatric Association, 2013).

Children with ASD present heterogeneous characteristics of social interaction difficulties, communication challenges, and a tendency to engage in repetitive behaviors ranging from significant cognitive and language impairments to superior cognitive and language abilities. In other words, the speech and language abilities of children with autism may run the gamut from virtually mute to highly verbal with good morphosyntax. However, symptoms and their severity vary widely across these three core areas. Taken together, these symptoms may result in relatively mild challenges for someone on the high-functioning end of the spectrum. For others, symptoms may be more severe, as when repetitive behaviors and lack of spoken language interfere with everyday life. However, regardless of these differences, the common characteristics and challenges associated with ASD impact the development of critical social communication skills. Bondy and Frost (2011) reported that 80% of preschool children with autism entering a public school program over a three-year period did not display functional communication skills.

Over the years, specialists working with children with autism have tried to work out different systems for developing the communication skills of these children, offering a variety of methodologies. Some specialists still insist that in the process of speech therapy with a child diagnosed with ASD, one should rely on traditional methods such as the ability to form

and develop sound transmission to repeat words and phrases. Other specialists, however, suggest not focusing on developing speech, but rather developing communication when working with these children, since children with ASD may have developed sound transmissions, words or phrases that are nonfunctional and do not serve a social purpose (Avagyan, 2017).

Vision serves as a primary stimulus for learning as well as an integrator of input from other sensory channels. Without vision as a central integrator, children who are blind often rely on the remaining senses of hearing, motor-kinesthetic feedback and smell to help them assign order and meaning to their world. Children with visual impairments often miss information that is important for the development of the social aspects of communication and the concepts or cognitive abilities that underlie the development of language. When selecting augmentative devices and designing alternative communication systems, the effects of congenital or acquired blindness or visual impairment on the child's language development and language system must be considered. The child's relationship to augmentative communication devices and tangible symbols may also be affected by attitudes toward object exploration. Children with visual impairments are at a clear disadvantage with respect to anticipating transitions between activities. If they do not understand the language of directions or fail to attend to them, they have no other clues to rely upon regarding the transition from one activity to the next. For this reason, calendar box schedules representing the length of time from the next step to the entire day of events are very helpful. Visually impaired children may respond to an organized array of objects, pictures, Braille cards, auditory messages or a combination of these (Goldware & Silver, 1998).

Augmentative and alternative communication (AAC) goals must be infused into all aspects of the academic and social curricula. When learning via routines, the child with autism or who is blind is exposed to a predictable chain of related events, providing increased order and organization to the day. Functional routines can be incorporated easily into special education and regular education classrooms when designed and implemented through the collaborative efforts of all relevant personnel from the start.

Augmentative and Alternative Communication Systems

Augmentative and alternative communication (AAC) is any device, system or method that improves the communication abilities for an individual with a communication impairment. AAC may refer to any method of communication used to supplement or replace speech for individuals with impairments in the production or comprehension of language.

AAC can be divided into two broad categories — *unaided* and *aided*. Unaided forms of AAC do not require an external tool. Unaided forms require some degree of motor control and do not require technology or a power source. Examples of unaided no-tech tools include gestures, manual signs, facial expressions, vocalizations, verbalizations and body language (*Augmentative and Alternative Communication*, 2018). Aided forms of AAC require some form of external support, either electronic or non-electronic. Aided forms of AAC are categorized into low- or light-tech, mid-tech, or high-tech tools.

Low-tech AAC devices are fairly simple in design, low in cost, and in some instances do not require a power source. Examples of low-tech AAC tools include pictures, objects, photographs, writing, and communication boards. High-tech AAC devices are often very powerful in terms of function, but are also at a higher cost. High-tech AAC devices typically require a power source and some form of training to properly program and maintain the device.

Examples of high-tech AAC include speech-generating devices, single-message devices and recordable/digitized devices, and software that enables dynamic symbol/language representation that is used with some form of technology hardware (e.g., computer, tablet, smartphone).

These alternative forms of communication would be appropriate for three different profiles of students who display the communication impairments typically associated with ASD diagnoses. First, AAC can be utilized as augmentative by supporting means of existing communication when the vocabulary of the child is poor and there are grammatical mistakes in the speech. Second, AAC can serve as a temporary means of communication until oral speech has been formed. Third, AAC can serve as the primary means of communication that can be with the individual throughout his/her whole life.

Topography-Based and Selection-Based Verbal Behavior

The form of the AAC system (e.g., low tech, high tech) should not be the only consideration when selecting an alternative response form for a language-delayed individual. There are important conceptual differences between the types of AAC systems available that should be considered. Speaking, sign language, and writing are classified as *topography-based verbal behavior*, whereas systems that require the speaker to point or select are classified as *selection-based verbal behavior* (Michael, 1985). In topography-based verbal behavior, the form of the response distinguishes one verbal response from another (e.g., signing *dog* clearly involves different movements and positions of the hands than signing *cat*). These topographical differences also appear in speaking and writing. In selection-based verbal behavior, the response form consists of pointing, touching, looking or indicating in some way. The form of this response is the same for each verbal

response, with the only difference being the stimulus that is pointed to (Michael, 1985).

Psycholinguistics does not generally distinguish between these two types of verbal behavior; it is generally considered that they are conceptually equal, as they are both manifestations of the same underlying cognitive process. Because of this, psycholinguistics focuses on the effect of the verbalization on the listener rather than on the role of the speaker. When analyzed from a behavioral perspective, there are several differences between these two types of verbal behavior, and these differences should be considered when a form of communication is being developed for an individual whose verbal repertoires are delayed (Sundberg & Sundberg, 1990).

Some of the important differences between topography-based and selection-based verbal behavior include both practical and conceptual considerations (Sundberg & Sundberg, 1990). One main practical consideration is that teachers and parents must learn at least some sign language in order for this form of topography-based communication to be successful. Selection-based systems eliminate this problem because there is no special training required to be a listener. Sign language also requires careful shaping of very complex motor skills, whereas pointing responses are often an easier response for many students. In addition, in selection-based systems, from a listener's point of view, the verbal stimulus produced by the client is often clearer than it is for a signer.

There are, however, some practical problems with these pointing systems that may interfere with the effectiveness of this form of communication (Sundberg & Sundberg, 1990). One obvious issue is the need to always have the device available and accessible to the speaker, which is not always possible, and the device may require frequent maintenance and need to be charged at all times. Also, many words are difficult to portray with a picture or

symbol — for example, verbs, prepositions and pronouns; and it may be impossible to interpret the symbol without a word accompanying it. An important feature of speech is that it does not require any form of environmental support, nor does signing.

Research conducted by Sundberg and Sundberg (1990) examined the difference between these two systems with regard to speed of acquisition, accuracy of responding, generalization, maintenance, spontaneity and the formation of equivalence classes. The data indicated that more training trials are required for mastery of selection-based responses, and performance (i.e., correct responding) was lower with the selection-based system. They showed that it was more difficult to establish stimulus classes with selection-based systems, which does not support the traditional psycholinguistic position that these types of verbal behavior are equivalent. These findings also do not support the tendency for speech pathologists to favor selection-based communication methods over topography-based communication methods for nonvocal learners.

Teaching Communication Using AAC

When beginning language intervention with any form of communication (i.e., topography-based, selection-based), it is imperative that effective teaching procedures are implemented. Sundberg and Partington (1998) have outlined procedures to increase cooperation and ensure that language instruction is effective —

1. Establish rapport; pair the teacher so that the teacher is associated with the delivery of reinforcing items and not the removal of fun items.

2. Capture and contrive motivation; teach language when motivation for items is strong.

3. Begin teaching by requiring the student to ask for his or her favorite things.

4. Provide prompts so that learning language is easy at first; fade prompts as the student becomes more independent.

5. Conduct language training in the student's natural environment; communication should be functional.

There are two common AAC forms used with individuals with language delays: picture exchange communication system (PECS) and GoTalkNow.

Picture Exchange Communication System (PECS)

Over the last few years in Armenia, low-tech AAC methods have been used in speech therapy, especially the picture exchange communication system (PECS). The PECS methodology was founded in 1985 (Bondy & Frost, 2002). Initially, it was designed for the communication development of children with autism (Bondy & Frost, 2011). Subsequently, this methodology has been used with people of different ages having communicative difficulties of various etiologies (Baca et al., 1994; Garfinkle & Schwartz, 1994; Norris-Holt, 2001; Rueda & Stillman, 2012). Today, PECS is successfully used in Europe, the United States, Canada, Japan, Australia, Armenia and other countries around the world (Avagyan, 2011a, 2011b; Baca et al., 1994; Bernstein, 1989). The primary goals of this methodology are functional communication skill development, initiation of speech, and spontaneous speech formation. With the help of PECS, the student learns to express his wishes, thoughts and, over the course of time, emotions, using pictures.

This system's primary goal is to teach the child functional communication. A secondary goal is to teach the child to speak. This doesn't mean, however, that speech is given up on. The goal is to teach the child to communicate in some manner while continuing to address the development of speech. In fact, many research-

ers report that this systematically enhances speech development (Glennen,1992; Silverman, Kurtz, & Draper, 2013).

The PECS training protocol closely parallels typical language development. The students learn to communicate specific messages. Students using PECS learn to communicate first with single pictures, but later to combine pictures to learn a variety of grammatical structures, semantic relationships and communicative functions. When we look at the day of our students, we see a series of activities. Each of them should be arranged for communicative opportunities by creating situations in which a student is likely to want something so that we can teach him how to communicate in order to get it. During this time, the children must have their own communication book, because they will be expected to take their book wherever they go. The book includes multiple pictures and a sentence strip.

The PECS methodology has six phases (Bondy & Frost, 2002, 2011). The first phase teaches a picture and item exchange. In phase two, the space between the child and the picture is increased. In phase three, the child is given a choice between two or three pictures. In phase four, the focus is on sentence structure. In phase five, the child learns to express her or his wishes and answer the question, "What do you want?" In phase six, the final phase, the child answers questions such as, "What is it?", "What do you see?", "What do you like?", "What don't you like?", "What kind of weather is outside?" and "What do you hear?" Taking into consideration the characteristics of grammar, syntax and flexibility of the Armenian language, PECS is modified with the creation of separate cards of auxiliary verbs, endings, conjunctions and so on (Avagyan, 2011).

GoTalk NOW

One type of AAC device that is based on selection-based communication is GoTalk. GoTalk is part of a line of assistive technology products that enables individuals with developmental disabilities or physical impairments to have their own voice (GoTalk NOW, 2012). GoTalk software can be quickly personalized and offers single and multiple message options. One specific capability of GoTalk technologies is to turn a personal iPad into a communication device with the use of GoTalk NOW.

GoTalk NOW includes various features that make it a good option for communication if an AAC device is necessary (GoTalk NOW, 2012). GoTalk NOW uses images from your iPad camera, photo library, or the built-in Internet search capability. These images can be modified by cropping, scaling and rotating them. One major benefit to GoTalk NOW as an AAC device for users who do not use English as their primary language is that it is possible to record one's own speech. This allows for the voice output to be programmed specifically for foreign languages, various dialects and differing accents. GoTalk NOW also has text-to-speech features and can play videos. Other features of GoTalk NOW include unlimited menu and communication pages with capabilities of anywhere from one to 25 buttons per page. It is also possible to program up to four of your most important messages or symbols into the core vocabulary feature, making it never more than one tap away.

AAC in Inclusive Settings

Alternative communication technologies have recently become necessary in the context of inclusive education. It is well known that in the modern world, any child who does not master the official language of the society is considered to have special education needs and in many countries is temporarily involved in inclu-

sive education (Galimore & Tharp, 1990; Glennen, 1992; Silverman, Kurtz, & Draper, 2013).

Inclusive education has been carried out in Armenia since the turn of the century. Before that, during the Soviet years, there was no inclusion. Children with visual, auditory, mental, speech and physical disorders were educated in special schools. In spite of Armenia's efforts towards inclusive education, there are still children with disabilities, including those with complex speech and communication disorders, who are sometimes left out from school-based education.

According to the United Nations International Children's Emergency Fund (UNICEF), in 2012, 63% of children with complex disorders, 48% of children with mental disorders, 56% of children with auditory impairments and 69% of children with physical disorders attended school (*It's About Inclusion*, 2012). The inclusion in schools and preschool institutions is highly important for children with speech and communication complex disorders. These not only give an opportunity to reveal the full potential of speech, physical, cognitive, emotional and social development of children, but also provide courses along with their peers without being left out from the family care (Kozloff, 1994; Tuzzi, 2009).

There is a need to provide the Armenian school system with favorable conditions for children with disabilities, including children with speech and communication disorders, taking into consideration the school physical infrastructure. These changes require improvement in the assessment of educational needs, individual educational planning and appropriate teaching methodology for these schools, as well as necessary professional intervention (Dunn & Dunn, 2007; Goosens, Crain, & Elder, 1994; Newcomer & Hammill, 1997).

In a case study by Avagyan, PECS methodology was used in conjunction with speech therapy with 44 children with autism, aged 2½–8. As a result of the speech therapy with PECS meth-

odology, oral speech was prompted in 78% of the children. In this case, alternative communication acted initially as a temporary tool, with the help of which speech was 'produced.' Sometimes, parallel with speech, PECS remains the additional means for expressing wishes, interests or state of being. In 9% of cases, alternative communication remains the only tool for communication that stays with the child for all of his or her life and is applied in various situations of life. In 13% of the cases, PECS was used for connected speech development, since the child did not have developed speech (Avagyan, 2011a, 2011b).

Our experience with PECS usage with children has shown that the work based on pictures accelerates vocabulary enrichment. The children learn grammatical constructions more easily and express themselves more freely, which may make them more self-confident. Well-developed speech is considered one of the most important means of socialization, dynamic activity and successful teaching in modern society. At the same time, it should be mentioned that modern methods of communication, in particular alternative communication approaches, are not widely applied by specialists in Armenia. The reasons for this may be —

- Not mastering the methods;
- Relying on Soviet and Russian literature on speech therapy;
- Reluctance to participate in professional trainings as a result of absence of need for licensing and specialized trainings;
- The large amounts of time that are needed for preparing necessary accessories (e.g., a communication book) for alternative communication;
- The parents' fear that when alternative communication is used, the child will not speak, because he or she will not need speech.

In order to solve the above-mentioned problems, we carry out informative work with parents and training courses for the specialists.

AAC for Children with ASD

M., 6 years old, has ASD, is nonverbal and attends inclusive school. He has had practical private therapies with the speech and language pathologist during which he learned to communicate via PECS. In the fourth phase of the PECS intervention, M. mastered the skill of communicating in sentences.

At school, the parents made the teacher aware that M. would communicate using pictures from now on and showed the communication book to the teacher. At first, the teacher was annoyed that she had to communicate with the child with the help of pictures. She considered her work in the inclusive setting already challenging. But that very same day, when the parent went to fetch her son from school, the teacher informed her that she had noticed something very interesting. Previously, every day at approximately 10:30–11:00 am, the child exhibited problematic and maladaptive behavior. For example, he would jump from his seat, yell and bounce. So the staff had no option but to ask the psychologist to help the child to calm down. Surprisingly, on this day at that hour, the child wrote on his sentence strip that he wanted to go to the restroom. He went to the toilet, and the problematic maladaptive behavior did not take place. Accordingly, the teacher realized that the communication book and the alternative communication helped her to understand why the student was misbehaving and what the student really wanted. The teacher understood that the use of PECS can be a useful communication tool in an inclusive classroom.

AAC for Children with Visual Impairments

When a child has a visual impairment or related disabilities, he or she may need to use alternative methods to communicate. Individuals with severe communication disorders and blindness rarely use speech-generating devices (SGDs) in their AAC system. Although SGD advancements help enhance the communication of many sighted individuals, those who are nonverbal-blind or deaf-blind often do not benefit from these technologies (Kovacs & Lightner, 2007).

Children with visual impairments often miss information that is important for the development of the social aspects of communication and the concepts that underlie the development of language. A child will need different solutions depending on, for example, the size of the symbols he or she can see on a device, where in the visual field the device needs to be positioned in order for it to be seen, or whether the child understands Braille.

Children who are blind often learn to read Braille as an alternative to print. These children must rely on tactual abilities and auditory skills. It is important to note these skills do not develop automatically in children who are blind, and training from an early age is necessary to equip children with these skills. Activities that will develop flexibility, dexterity and strength in their wrists and hands are essential. The development of light finger touch, line-tracking skills and skills in tactual perception (e.g., discriminating textures and shapes) requires much training. While the general sequence of development of literacy in children who are blind emerges from the same processes that shape literacy for their sighted peers, they will have had less opportunity to explore their environment and to learn through incidental learning and unplanned experiences. Activities designed to develop meaningful language based on concrete experiences are important. Braille

is based on a 'cell' of six raised dots arranged like a six on a domino. Most children who write through Braille begin by using a mechanical Braille writer called a Perkins Brailler. Later, children may use electronic Braille writing devices that have a tactile display and/or speech output.

Most of these machines can store information that can be translated into print. Braille users will usually be taught to touch-type using a conventional QWERTY keyboard. Software is available to enable children to record and retrieve information using synthesized speech.

The following are some broad categories of devices used by some children with visual impairments —

- **Communication board.** A communication board can be made out of cardboard, wood or another solid material. Typically, it has a grid on it with two or more symbols. The symbols can be concrete, such as actual objects or parts of objects; pictorial, such as photographs or drawings; alphabet symbols in print or Braille; or words in print or Braille. When using a communication board, a child can express herself by pointing to the symbol, picture, letters or words that convey what she wants to share;

- **Recorded speech devices.** With a recorded speech device, someone (parent or teacher) records messages for the child to use. The child activates the message using a switch or other button. Systems with multiple switches can store four, six, eight or more messages. There are very complex AAC systems that enable the user to convey a wide array of information. For example, if the child has a device with four prerecorded message slots, the teacher or parent might record four messages for bedtime, such as, "I want a blanket," "Read me another story," "I love you," "Good night" and "Sit with me and rub my back." The child can press the appropri-

ate switch or button to tell you what he or she wants;

- **Keyboards.** A child may type a message on a keyboard, which then reads the message aloud. The symbols on the keyboard might be letters, words or picture symbols;

It's important to remember that children need multiple methods of expressing themselves; Ideally, the child should not have to rely solely on one method of communication. Providing an array of communication options that he or she can use now and in the future will help the child grow and develop and participate more fully in daily life.

Tactile representations

Tactile representations may include partial objects, more abstract tactile symbols and Braille. This access method would utilize devices that can support tactile symbols such as the GoTalk SuperTalker, which activates when pressed. This does not typically include touchscreen devices.

Motor memory/tactile guide devices without tactile symbols but with tactile guides such as keyguards are paired with markers to guide the user. Bluetooth Braille keyboards paired with text-to-speech software may also be included in this category, as well as voice output devices and SGDs with keyguards and consistently placed language to support motor memory for the location of vocabulary.

Auditory prompts and auditory fishing

Similar to the above, auditory fishing or auditory prompts with direct selection typically involve a keyguard. This method requires a device or app that allows for the use of auditory prompts with direct selection. The auditory prompts can be short and are typically played to the user at a lower volume as they explore buttons to locate their desired target. By acti-

vating the button a second time, the target is selected and spoken.

Auditory scanning

Devices and apps that support auditory scanning include the ability to assign an auditory prompt (similar to auditory fishing) to each button. The items can be stepped through using two-switch/step scanning or automatically played at regular intervals using automatic scanning. The user can select the target by activating a switch after hearing the prompt for the desired message.

Tips for Teachers

- Don't be afraid of having a child who uses AAC in your classroom; don't let the challenge scare you as a teacher.
- Worry about the child asking for something and being told to go and use their AAC; how to fade; and when to accept talking.
- Try to include other children in the communication process; encourage communication between the students and not just the student and an adult in the classroom.
- Create systems for children to be evaluated using their AAC devices; this is their way of talking and also answering questions during classes, participating, being able to be actively engaged in the learning process.

Thoughts for Leaders

- If the classroom is noisy, it doesn't mean that something is going wrong. It means that the professionals are working on improving the behaviors of the student.
- Encourage and support an advanced and modern way of thinking about and utilizing alternative communication methodologies.
- Organize and encourage collaboration between other teachers, specialists and the

parents when considering and implementing alternative communication methodologies.
- Provide opportunities for students to use their AAC in a variety of environments and settings.
- Continually monitor the use of AAC to ensure the correct use by the students and the correct teaching techniques of the instructors.

Reflection Questions

- If you've ever worked with a student who used AAC, what were your instructional strategies, and would you do anything differently with this information?
- How would you handle a student who has challenging behaviors in your class while using AAC?
- What ideas do you have to include pictures, not only as a method of communication, but also for all the students in a universally designed classroom?
- What teaching techniques discussed in this chapter will be most useful for you in your classroom?
- Can you give an example of a time that you successfully used AAC in your classroom?

Glossary

Aided AAC — Any form of AAC that requires some form of external support, either electronic or non-electronic.

Augmentative and alternative communication — Any device, system, or method that improves the communication abilities for an individual with a communication impairment.

Selection-based verbal behavior — Verbal behavior in which the response form consists of pointing, touching, looking or indicating in some way.

Topography-based verbal behavior — Verbal behavior in which the form of the response distinguishes one verbal response from another.

Unaided AAC — Any form of AAC that does not require an external tool.

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CHAPTER 11:

Enhancing the Social and Psychological Inclusion of Students with Special Education Needs

Brian H. Abery, University of Minnesota

Marianna Harutyunyan, Armenian State Pedagogical University

Social aspects of inclusive education are as important and physical and academic inclusion. Not only is social inclusion and a sense of belonging important in and of itself, but this outcome is closely connected to engagement in the classroom, academic achievement, and later success in employment.

Before reading this chapter, ask yourself the following —

• What unique contribution does the social inclusion of students with special education needs make to their development?

• What are the differences between physical, instructional and social-psychological inclusion?

• What are some of the barriers to the social inclusion of students with special education needs, both in school and the community?

• In what ways can schools support students with special education needs and their typically developing peers to establish and maintain positive social relationships?

Introduction

Developing and maintaining valued social relationships with peers, having companions with whom to engage in recreation and leisure activities, and participating and having a presence in the school and community, are all critical aspects of inclusion. Unfortunately, recent trends in the field of education in many countries have resulted in a situation in which the educational system and its staff view their primary, if not sole, responsibility to be facilitating the development of academic skills. As a result, the social and psychological aspects of inclusion are all too often assumed to be the responsibility of the family. *Social inclusion* or experiencing ongoing, positive social interactions with peers of one's choosing, and *psychological inclusion;* feeling like a valued, accepted member of the group, are critical outcomes toward which attention must be directed if one is to fulfill the mandates for educational inclusion laid out in Article 24 of the United Nations Conference on the Rights of Persons with Disabilities (2006). Providing opportunities for the development and maintenance of valued social relationships with peers is also critical because many of the most effective instructional approaches to inclusive education are contingent on positive peer-to-peer interaction. Through its ratification of the Convention on the Rights of Persons with Disabilities, the Government of the Republic of Armenia undertook to promote, safeguard and secure the full and equal enjoyment by persons with disabilities of their human rights and fundamental freedoms. Support therefore must be extended to persons with disabilities from early childhood to ensure they are developing to their full potential and being welcomed as equal members of society (Convention on the Rights of Persons with Disabilities, 2006).

In exploring factors related to the social and psychological inclusion of children and youth with disabilities, it is important to consider that responsibility for success in this arena is not the sole or even the primary responsibility of students with disabilities. School administrators set the tone for an appreciation of diversity within the educational setting. Teachers and specialists can either create classroom conditions that enhance opportunities for positive social interactions between students with and without disabilities or serve as barriers to them. Parents, both of children with and without disabilities, can accept and support the development of these relationships, or, as a result of unjustified fears and anxieties, over-protectiveness and stereotypes and prejudices, interfere with the development and maintenance of positive social interactions. Finally, we must acknowledge that social relationships are dyadic in nature. The peers of students with disabilities, if they are to mature into members of society who are able to see the 'person first'

and disability as only one of many characteristics of an individual's identity, will need to re-examine their attitudes toward having classmates with disabilities and behavior that all too often excludes, bullies and harasses their fellow students.

What Are Social and Psychological Inclusion?

Social and psychological inclusion start with the conviction that all children and youth have the right to develop and maintain friendships and other valued social relationships with peers of their own choosing, experience a sense of belonging, and fully participate and develop a presence in the community. True social and psychological inclusion is achieved when students with disabilities develop and maintain supportive circles of friends whom they have chosen for themselves; experience friendships and other social relationships that move from the contexts in which they were initially made to new ones; experience the levels of emotional closeness they desire with their friends; experience a sense of belonging and respect in their schools and communities; and are no longer harassed, viewed as 'special,' or pitied but rather are treated in a manner similar to their peers without disabilities. Cobigo et al. (2012) defined social inclusion well, contending that children must —

- Experience a sense of belonging in a social network within which they receive and contribute support,
- Experience valued social roles and
- Ge trusted to perform those roles in the community.

Walker et al. (2011) extended this definition by adding societal factors, including the acceptance of people with disabilities within school, work and community settings.

As Giangreco (2003) suggested, true inclusion reflects a *balanced approach to education*

in which children are not only physically and academically included, but also experience inclusion in the social and psychological sense. For Giangreco, social and psychological inclusion refer to the extent to which students with disabilities experience a sense of belonging in and out of the classroom during the school day and beyond. It reflects a situation in which all students, including students with disabilities, are considered to be full members of the school community and entitled to equal access to social and academic opportunities (Keys, McMahon, & Viola, 2014). Social and psychological inclusion are closely tied to practices that support students with disabilities in developing the personal capacities associated with the development and maintenance of positive social relationships and the provision of opportunities to connect with peers without disabilities on the basis of mutual choice. Teachers and multidisciplinary team members are responsible for providing a balanced approach to education. This involves supporting the development of both the academic and social aspects of a child's life, including their social inclusion, social status and quality of relationships. It also entails ensuring that the attitudes and behaviors of both educational staff and peers are supportive of positive outcomes within each of these areas. Although education makes a critical contribution to the development of all children, it has a special significance for those with disabilities. Schools have the opportunity to provide environments in which social interaction with peers and adults helps children with disabilities acquire new skills and capacities, greater self-confidence, and a sense of equality.

Social inclusion and psychological inclusion are complex constructs (*see Figure 1 on page 155*), especially when one attempts to apply them to children, youth and adults, with a wide variety of abilities and challenges that range from mild to severe. It is simplistic to think of this aspect of inclusion as comprising only

social relationships and friendships; it encompasses far more than that and is key to children and youth with disabilities being viewed by society as fully engaged members of their communities. Social inclusion has value for children and youth with disabilities as both an outcome and a process. It is about ensuring that in school, at home and in the community, all children have opportunities to actively participate as valued, respected and contributing individuals. In the context of inclusive education, supporting social inclusion requires much more than merely providing opportunities for students with and without disabilities to be educated together. Rather than entailing the removal of barriers and risks, it requires creating an inclusive school community in which diversity in all its forms is not only accepted, but embraced and celebrated. It requires investments and action to bring about changes in false stereotypes among peers, parents and educators; creation of the understanding that we are more alike than different; and offering ongoing opportunities for *all* students to contribute their gifts and leadership capacities to the group.

There are a number of different dimensions of social and psychological inclusion (Donnelly and Coakley, 2002), all of which need to be effectively addressed if one is to create the conditions for authentic inclusion. These dimensions need to be made accessible to children and youth with disabilities in their three most important and interconnected microsystems (or the environments in which they lead their daily lives) — family, school and peer group.

Valued recognition

Donnelly and Coakley (2002) use *valued recognition* in reference to significant others in children's lives as well as other members of their community, conferring on them and the group(s) to which they belong the recognition and respect they deserve. This includes not

equating disability with defect or pathology; understanding that disability is only one of many characteristics of an individual and not their full identity; accepting persons for who they are with all their gifts and challenges; and supporting students to not just be *in* their school community but *of* their school community.

Opportunities to experience challenges and contribute

In order to reach their fullest potential, all children, with and without disabilities, require opportunities to challenge themselves. Managing risk (we all experience rejection in social situations at some point in our lives), rather than attempting to limit challenges for fear a child or youth will be emotionally damaged, provides students with the chance to stretch themselves and learn from all the outcomes they experience.

Engagement

Having the right and the necessary supports to become involved in the activities that one desires and about which one is most passionate has an impact not only on social inclusion, but academic development as well. It increases the likelihood that students will stay engaged in their communities after school, educating themselves about community problems, becoming actively involved in attempts to address them, and becoming advocates for good causes. This does not entail all students being treated equally, but rather, equitably, so that each has the opportunity to participate.

Access to inclusive environments

In order to experience social inclusion, students with disabilities need to have access to the same environments as their typically developing peers. This includes access to physical spaces such as playgrounds, where the principles of universal design for learning have been applied

and are accessible, as well as social spaces where peers are most likely to congregate and socialize. Such access provides not only opportunities for social interactions but a chance for children and youth to share their gifts and capacities with others.

Figure 1. Components of Social and Psychological Inclusion
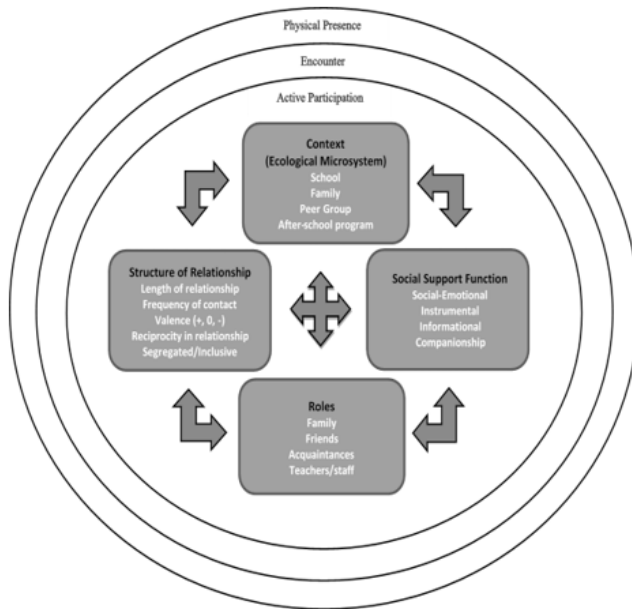
It is important to keep in mind that within each environment, there are simple things one can do to enhance the probability of social interaction and inclusion. One can arrange seating, activities and other aspects of the ecology in a manner that encourages students to interact with each other or minimizes opportunities to socialize. Unfortunately, many educators still arrange their classrooms with the latter in mind, forgetting that much of the learning that occurs within school is based upon students interacting with each other rather than with adults. Within the context of the school, however, educators have the opportunity to support positive social interaction between peers with and without disabilities, their cooperation, and the development within every single child a sense of belonging.

Why Support Social and Psychological Inclusion?

Social and psychological inclusion are just as critical outcomes to which to attend in education as including students with disabilities in an instructional or academic sense. The UN Convention on the Rights of Persons with Disabilities (2006) explicitly includes the social inclusion of persons with disabilities within the community as a fundamental right and responsibility of society (Quinn & Doyle, 2012). In addition, people of all ages with disabilities have themselves identified increased opportunities for friendship and community involvement as important goals (Abbott & McConkey, 2006; Kampert & Gorerczny, 2007). It is therefore the responsibility of our schools, youth organizations, community groups, and faith communities to take an active role in promoting the idea of social inclusion. However, students with disabilities continue to experience high rates of social isolation (Bigby, 2008; Chamberlain, Kasari, & Rotheram-Fuller, 2007; Forrester-Jones et al., 2006; Milner & Kelly, 2009), with their social networks comprising mainly family members and professionals (Lippold & Burns, 2009).

The importance of supporting the social and psychological inclusion of students with disabilities extends beyond respecting an individual's basic rights as it is closely tied to the outcomes experienced by children and youth both with and without disability. Over the past several decades, research has demonstrated that social inclusion promotes happiness, self-esteem, self-confidence, and mental health (Forrester-Jones et al., 2006). Being socially included has been found to facilitate well-being in a variety of ways (Johnson, Douglas, Bigby, & Iacono, 2012), as well as decision-making capacities (Johnson, Douglas, Bigby, & Iacono, 2009), with children attending inclusive schools developing higher levels of personal and social responsibility than their segregated school peers (Hardi-

man, Guerin, & Fitzsimons, 2009). Experiencing a sense of social inclusion is a major influence on successful adjustment to school (Buhs, Ladd, & Herald, 2006); ongoing participation in peer groups (McElwain, Olson, & Volling, 2002), academic performance (Flook, Repetti, & Ullman, 2005), the development of social skills and social competence (Cole & Meyer, 1991; Fisher & Meyer, 2002; Fryxell & Kennedy, 1995; Hunt, Farron-Davis, Beckstead, Curtis, & Goetz, 1994; Kennedy, Shukla, & Fryxell, 1997), and long-term social adjustment (Bagwell, Schmidt, Newcomb, & Bukowski, 2001) in adulthood. Research results indicate that individuals with disabilities who are socially included are, later in life, more likely to contribute to society and be employed (Overmars-Marx et al., 2014; Power, 2013), as well as demonstrate an ability to overcome social exclusion when they do experience it (Mahar et al., 2013; McConkey & Collins, 2010a). They are less likely to live in poverty, be unemployed, and/or have poor access to healthcare (Power, 2013). Higher levels of social inclusion have also been found to enhance community safety and protect individuals with and without disabilities from abuse (Power, 2013; Quinn & Doyle, 2012). Early social acceptance by the peer group and accompanying social engagement with the peer group appears to be a facilitator of social competence. Conversely, early social rejection by peers persists across the school years and is a strong predictor for poor outcomes in adulthood.

Although most research in the area has focused on persons with disabilities, the benefits of social and psychological inclusion also extend to the nondisabled population. Researchers have suggested that social inclusion can decrease negative attitudes, stereotypes, stigma and discrimination against people with intellectual and developmental disabilities (Johnson et al., 2009; Mahar et al., 2013; Power, 2013). Within the school context, social inclusion has also been found to increase the leadership

skills and abilities of students who are actively engaged in inclusive activities. Social inclusion also fulfills the aims of national and international public policies and mandates complying with the Convention on the Rights of Persons with Disabilities and national policies (Cobigo et al., 2012; Duggan & Linehan, 2013; Mahar et al., 2013; Martin & Cobigo, 2011; Overmars-Marx et al., 2014; Power, 2013; Quinn & Doyle, 2012). As many authors have argued, social inclusion improves people's lives — for people with and without disabilities (Mahar, Cobigo, & Stuart, 2013; Mansell, Elliott, Beadle-Brown, Ashman, & Macdonald, 2002).

Promoting Social and Psychological Inclusion in Schools

In Armenia and most other countries, today's teachers are responsible for the education of children without disabilities who possess a wide variety of learning styles and personal capacities. The ratification of the UN CRPD (2006) by Armenia and the subsequent goals for inclusive education the country has set for itself bring an additional group of children — children with disabilities — into the educational mix. Most general educators are currently ill prepared to include such children from an academic standpoint, with the result that social and psychological outcomes of these students often are given little thought or attention. As a result, teacher attitudes toward the inclusion of students with disabilities have typically been found to be less than fully supportive (Hastings & Oakford, 2003; Odom, 2000; Parsarum, 2006; Pivik, McComas, & LaFlanne, 2002). The research results noted above, however, indicate that a balanced approach to the education of children with and without disabilities needs to be taken if schools are to fulfill their obligations to society.

The outcomes associated with social inclusion are at least partially due to the fact that much of the learning that occurs in the lives

of each of us is not the result of the direct teaching of educational personnel, but rather, from peers educating each other through the powerful process of observational learning. First brought to the forefront in the early 1960s through the work of Albert Bandura (1969) and Walter Mischel (1972), 60 years of research provides powerful evidence of the critical role that modeling and observational learning plays in the development of children's social skills, empathy, altruistic behavior, intellectual development and speech and language development. The child with a disability who is educated in a homogeneous, segregated class or at a special school is exposed to nowhere near the diversity in same-age role models as their counterpart who receives instruction within an inclusive classroom. One could argue, and the research supports this point, that many stereotypical 'disability' behaviors are more a function of the segregated social contexts in which children and youth are educated than of the disability a child experiences.

The general curriculum provides a natural context for peer-to-peer interaction as students work together on shared learning tasks — providing a meaningful context for acquiring social-related skills, accessing social supports, meeting additional classmates and developing new friendships. Improving the social relationships of students with disabilities has been an ongoing concern of educators, parents and peers ever since the initial passage of legislation supporting a more inclusive approach to education. However, students with special education needs, especially those with more significant disabilities, are among the most socially isolated children and youth — an outcome that becomes more likely as they progress from elementary to secondary school (Carter, Hughes, Guth, & Copeland 2005; Marder, Wagner, & Sumi, 2003). The social benefits of peer-mediated strategies are well documented (e.g., Carter & Hughes, 2005).

Vygotsky's theories of learning are another reason to support the social and psychological inclusion of students with special education needs within the school context. Adherents to his conceptual framework place emphasis on the fact that many forms of instruction are best offered in mainstream social environments (e.g., the general education classroom). These considerations do not disappear — rather, they are only amplified when children with significant disabilities are involved (Gindis, 2003). Taking into account the potential impact of social relationships with peers, educational assistants and teachers on academic instruction, direct attention needs to be paid to student-teacher and peer-to-peer social interactions, the manner in which seating and educational assistant arrangements often exclude students with disabilities from aspects of social interaction in the classroom (Forman & McCormick, 1995), social positioning (Harrn & van Langenhove, 1999), and student-student power relationships.

In the effective inclusive classroom, all students need to be highly engaged in ongoing conversations with teachers and peers if they are to learn effectively, and teachers must creatively employ a wide variety of participation strategies that encourage active social inclusion of all their students in order to maximize learning (Tharp, Estrada, Dalton, & Yamauchi, 2000). This has become especially true in countries in which the traditional paradigm of teachers lecturing students has been replaced by a more active set of activity-based learning strategies in which students collaborate with each other in small groups, with a premium placed on participation and contributing, as best as one can, to group-based products. For students with a variety of disabilities (e.g., intellectual disability; autism spectrum disorder; attention deficit hyperactivity disorder), social skill instruction, including how to take turns, offer criticism and provide support may need to be used to support children and youth with disabilities actively

engaging and having the supports they need, whether these are of the natural variety from peers or from education professionals within the classroom.

Current trends, while placing greater responsibility upon families to facilitate social inclusion, should not be viewed as making this goal impossible to reach. Determination, creativity, and effective planning can support children and youth with disabilities to develop and maintain valued social relationships with persons of their own choosing and to feel psychologically included and accepted in their schools and communities. It will, however, take a concerted effort on the part of teachers, specialists, peers, parents, and students with disabilities themselves if this goal is to be achieved.

Taking the First Steps

Although it can be a challenge to develop a classroom, school and community environment in which all children with special education needs experience a sense of inclusion, such an outcome can be achieved if teachers, specialists, school administrators and parents work together to support students in achieving this outcome. Over the course of the past 20–25 years, considerable knowledge has been accumulated on the part of educators who have attempted to foster this outcome. Careful consideration of this knowledge, a synopsis of which is provided below, is a first step on the road to enhanced social and psychological inclusion.

Believe that inclusion is possible

If enhancing the inclusion of students with disabilities and other special education needs is perceived as an impossible task, it is unlikely that this goal will ever be reached. On the other hand, if inclusion is perceived as a 'doable' challenge, it is much more likely that all involved, including students with and without disabilities,

family members and persons in the community will be motivated and willing to work toward this outcome.

Do not assume that physical presence will guarantee social and/or psychological inclusion

A physical presence in the general education classroom is *a necessary but not sufficient condition* for social and psychological inclusion (Frea, Craig-Unkefer, Odom, & Johnson, 1999). Schools and families need to work together with students to create an atmosphere where mutual understanding, respect and positive social interaction develop.

Develop an action plan

Given that social inclusion is a crucial developmental outcome, it should be included in the ILP of every student with special education needs. Starting early (e.g., the preschool years) to plan for the creation of positive contexts (e.g., play groups, after-school activities) for positive social interactions and environments in which a child's disability is viewed as merely one among his or her many characteristics is critical.

Obtain administrative support

In order for social inclusion to take root, it must be supported at all levels of a school or community organization, starting with administrators. Begin by identifying administrators most likely to be supportive of promoting social and psychological inclusion, and speak with them about how changing the culture of the school to one that is more inclusive will benefit all students and the ways it 'fits' with the mission and vision of the organization.

Ensure the development of an inclusive school culture

Schools in which students with special education needs experience social and psychological inclusion are characterized by an atmosphere in which all aspects of diversity are not only accepted, but celebrated. Work with administrators, teachers and students will be necessary to change the cultures of schools that do not fit this description, with an emphasis placed not only on differences due to disability, but also on those associated with other aspects of diversity (e.g., socioeconomic status, ethnic/racial group membership; religious affiliation).

Make use of the resources you have available, and create new ones when necessary

Making inclusion happen is hard work and takes both effort and support. Give yourself the time to ensure that the necessary resources are available and that you can access them when needed. This will include developing knowledge of existing resources in the school and community, including organizations and programs (both disability- and non-disability-focused), activities, and persons available in your school and community who can support working toward this outcome.

On an individual basis, identify activities for which students with disabilities have a passion

Friendships are most often developed between individuals who share the same places and have similar interests. One of the initial steps in fostering enhanced social and psychological inclusion is, therefore, to discover the passions of the students with disabilities who you are working to include, and then finding students without disabilities who are engaged in these and similar activities. This approach ensures both motivation to take part in the activity on an ongoing basis and greater opportunities for meeting with and socially connecting with others.

Provide opportunities for choice and self-determination

Students are much more likely to become invested in activities and participate in them for extended periods if they have a choice in selecting the activities. This requires that they be offered a variety of choices of inclusive activities and allowed to select those in which they are most interested. All individuals also desire to choose their own friends and to have others choose them. Respect the right of students to choose their own friends, whether these are individuals with or without disabilities.

Identify the strengths, gifts and capacities of students

All too often it is assumed that students with special education needs have few, if any, strengths or gifts. Uncovering and letting others know the personal capacities of students with special education needs is critical to facilitating social and psychological inclusion. Such information has not only the potential to change peer attitudes, but can serve as one factor in identifying potential activities designed to enhance inclusion.

Identify a champion or bridgebuilder

A single individual has the capacity to enhance the degree to which a student with special education needs is socially and psychologically included. Identify such individuals among educational staff, peers and others, and inquire as to whether they might be interested in serving in the role of a bridgebuilder. Such individuals are often 'social stars,' serving as the hubs of extensive social networks, and can be a critical human resource.

Understand the perspectives and resources available to families. An understanding of the perspectives of parents about the social and psychological inclusion of their child with a disability is critical if teachers are to effectively work with families to support the development of social relationships. Family support is needed to make social inclusion happen, but working toward this goal comes with some risks that, if misunderstood by parents, can result in their failing to support efforts in this area. It is also critical to understand the capacity of families to provide at least some of the concrete supports needed to make social and psychological inclusion a reality, including program fees, transportation and a willingness to allow their family member with a disability to experience some challenges.

Organization Inclusion: Creating an Inclusive School Culture

Facilitating the acceptance of diversity at a schoolwide level, including the development of positive attitudes toward children with disabilities, is critical in an era where national legislation has moved schools toward educating greater numbers of students with disabilities and special education needs within general education settings. When children with and without disabilities grow up together and have a history of social interaction, diversity with respect to personal capacities tends to be accepted. Peers demonstrate understanding for individual differences. In their play and other interactions, these differences are taken into account, and young children are quite supportive of each other.

A truly inclusive school starts from the premise that all students, staff and administrators experience a sense of belonging, are supported to realize their potential, and are able to contribute to the life of the school community. Creating an inclusive school atmosphere/environment is critical because schools act as mirrors of the larger community. There is a great opportunity to teach students with different abilities early in their development as citizens — to help them to learn behavior that will eventually help them to not only accept but cherish and celebrate a truly inclusive community. Inclusive education is therefore both a philosophy and a practice that allows each student to feel respected, confident and safe, as well as develop to his own potential. This can only be accomplished when all students are socially and psychologically included.

In most countries, however, social interactions between children with and without disabilities at an early age are quite limited. As a result, by the time students enter school or shortly thereafter, developing students have typically been found to have already begun developing negative attitudes about their peers with disabilities. The attitudes of Irish (e.g., Gash & Coffey, 1995), Dutch (Bakker, Denessen, Bosman, Krijger, & Bouts, 2007), Australian (Thomas, Foreman, & Remenyi, 1985), Greek (Nikolaraizi, Kumar, Favazza, Sideridis, Koulousiou, & Riall, 2005), Swedish (de Verdier, 2016), Zambian (Nabuzoka & Rýnning, 1997), and United States (Lindsay & McPherson, 2012; Verdier, 2016) children toward their peers with disabilities have all been studied, with similar findings: Attitudes develop quite early in childhood (Innes & Diamond, 1999). They are shaped by teachers' and parents' beliefs (Gollnick & Chinn, 2002) and tend to become progressively negative over time (Ferguson, 1999; Swaim & Morgan, 2001). Children between the ages of 3 and 12 already prefer being in proximity to typically developing peers over peers with disabilities (Nowicki & Sandieson, 2002). Students with disabilities experience lower centrality, acceptance, companionship and reciprocity; greater rejection; and significantly less intimacy in their relationships than their typically developing peers (Bakker, Denessen, Bosman, Krijger,

& Bouts, 2007; Bossaert, Colpin, Pijl, & Petry; 2015; Chamberlain, Kasari, & Rotheram-Fuller, 2007; Kasari, Gulsrud, & Rotheram-Fuller, 2011; Koster, Pijl, Nakken, & Van Houten, 2010; Ruijs & Peetsma, 2009). Furthermore, there is evidence that proximity to peers who have disabilities (e.g., in inclusive school settings) does not always result in positive attitudes (Bakker & Bosman, 2003; Gallagher et al., 2000; Ochs, Kremer-Sadlik, Solomon, & Gainer Sirota, 2001) with a number of investigations suggesting that children will interact with peers who have disabilities only in structured settings where they are encouraged explicitly to interact together (Frea, Craig- Unkefer, Odom, & Johnson, 1999).

Based on these findings, it is critical that administrators, general and special educators, teachers, parents and students work together to establish and maintain an inclusive school culture. Referred to as *organizational inclusion,* this means the extent to which inclusion is explicitly incorporated into the mission and values of the school and supported by school leaders, staff and teachers through communication, professional development and practice (McMahon, Keys, Berardi, Crouch, & Coker, 2016). Attributes of school culture underlying the social and psychological inclusion of disabilities and other special education needs include —

- Celebrating diversity in all its forms;
- Valuing student voices;
- Providing opportunities for students and staff to share their abilities and capacities with others;
- Authority sharing;
- Accountability of students to each other;
- An understanding of disability and disability-related issues as part of school preparation for inclusive education;
- Participation in shared routines and activities;

- Provision of opportunities for all students to participate in events aimed at developing schoolwide community spirit (Carreiro King, 2003; Cornelius & Herrenkohl, 2004; Erwin & Guintini, 2000; Parsons, 2003).

Work undertaken by the SWIFT (Schoolwide Integrated Framework for Transformation) Education Center at the University of Kansas in the United States (Sailor & McCart, 2014) underlines the critical role that school administrators play in creating a culture that supports inclusion. Site leadership has been identified by this group as laying a strong foundation to transform school culture (Hoppey & McLeskey, 2010; Shogren, McCart, Lyon, & Sailor, 2015). Strong and engaged school administrators and other leadership staff set a vision for the work that needs to be done to change school culture, and they both model and provide a visible commitment to ensuring a respect for diversity and the social inclusion of students with special education needs. Working within a team-based approach, such teams mobilize the resources necessary to create positive change within the school, and they monitor progress, fidelity of implementation and next steps for continuous improvement (McCart, Sailor, Bezdek, & Satter, 2014). Effective school administrators support the need for creating communities of learning focused on making a school truly inclusive, and they engage teachers, families and students in this process. Creating an inclusive school will not be successful without embracing the diversity that each student brings to the school and without including every student, educator and parent. Schools must ensure that *all* differences are respected and provide students and staff with opportunities for learning about diverse perspectives, experiences and knowledge (Creating an Inclusive School, 2011).

A second critical part of creating an inclusive school culture entails efforts to create and maintain effective educator support systems (McCart et al., 2014). These include —

- Teacher access to programs that support enhanced social and psychological inclusion;

- An understanding among staff, parents and students of the critical components underlying an inclusive culture and its impact on learning and

- Sufficient learning experiences for teachers, parents and students that support the development of a deep understanding of the importance of accepting, valuing and celebrating diversity as well as a view of disability as but one aspect of diversity.

Through developing high-quality supports in these areas, educational administrators and other leaders have the capacity to initiate real change in their schools with respect to the manner in which staff and students respond to and value students with special education needs. This type of change sets the groundwork for the success of school-based programs designed to provide all students with the opportunity to develop valued social relationships and experience a sense of belonging. In their study of the inclusion of students with disabilities from urban schools in the United States, McMahon et al. (2016) found that organizational inclusion was associated with greater student satisfaction with their school and stronger feelings of school belonging. This result is consistent with previous research that has found that an organizational focus on the professional development of general education teachers is likely to improve teacher attitudes toward inclusion and may therefore improve student outcomes indirectly (Mintz, 2007; Winter, 2006).

School-Based Programs Designed to Support Social and Psychological Inclusion

In spite of multiple research efforts documenting the bias of typically developing students toward their peers with disabilities, the literature also shows that children's attitudes can be influenced to reflect greater acceptance (Lewis, 1995). These are the results of studies focused on interventions implemented through a variety of media, including video (e.g., Siperstein, Bak, & O'Keefe, 1988), information about the disability (e.g., Swaim & Morgan, 2001), drama (e.g., Gash & Coffey, 1995), discussion (e.g., Gash, 1992), readalouds (e.g., Trepanier-Street & Romatowski, 1996) and structured interactions (e.g., Favazza, Phillipsen, & Kumar, 2000).

There are various ways to support student attitudinal change. Children's literature has been used for some time to promote positive attitudes toward persons with disabilities. Hagino (1980) was among the first to suggest that children's literature that includes individuals with disabilities depicted in a positive but realistic manner might be woven into the curriculum to promote acceptance of peers with disabilities. Trepanier-Street and Romatowski (1996) as well as Nabuzoka & Rýnning (1997) used children's literature in a classroom intervention that positively influenced students' attitudes toward peers with disabilities.

Another approach for teaching students about diversity and disability that can be used along with children's literature is *guided discussion*. This approach attempts to link the literature in question to the everyday lives of students. Guided discussion can be used as an additive, or embedded, activity with students and teachers —

- Discussing story content (facts),

- The roles (and their accuracy) of children with disabilities,

- Relating the story to the past experiences of students,

- Highlighting similarities between the character with disabilities and student readers,

- Discussing any supports received by the characters with assistive technology and their relevance to the concept of equity, and

- Envisioning future experiences students might have with their peers with disabilities (Favazza & Odom, 1997).

A third approach that has been used quite frequently in the United States and Canada to support the development of positive attitudes toward peers with disabilities among younger children is puppet shows. Two widely used puppet programs are the *Kids on the Block* puppet group (Aiello, 1988; Dunst, 2012, 2014) and the *Count Me In* puppet program (Goldberg et al., 1981; PACER Center, 2011). Both programs include the use of large puppets representing children with a variety of disabilities as well as other aspects of diversity. The programs provide scripts for each puppet designed to promote awareness of disabilities, correct misconceptions, provide accurate information about each child's abilities and disability and allow for a question-and-answer period. Aiello (1988) reported that the *Kids on the Block* puppet show was an effective method for achieving attitude and knowledge change. In two different studies as well as a meta-analysis, Dunst (2012, 2014) found that *Kids on the Block* performances had a positive impact on knowledge and attitudes toward disability of second-, third- and fourth-grade students. Her meta-analysis (Dunst, 2014) of twenty studies found these programs to have a small to moderate impact on student attitudes.

Programmatic Approaches to Fostering Social and Psychological Inclusion

Although social inclusion may vary as a function of the severity of a student's disability, all students need to be provided with opportunities to connect with their peers and develop a sense of acceptance and belonging in their schools, communities and classrooms. Over the past three decades, a number of programs have been developed, the goal of which has been to support the enhanced social and psychological inclusion of students with special education needs. Some of these are peer mediated. Others are educator led and, while having a social inclusion component, also focus on academic outcomes.

Peer-mediated interventions (PMI)

PMI is a strategy through which typically developing peers are trained to interact with students with disabilities and support them in a wide variety of areas (Bass & Mulick, 2007; Chan et al., 2009). PMI may involve peers in the instructional process (*Peer-Assisted Learning Strategies — PALS*), behavioral interventions, and/or social inclusion (e.g., *Circle of Friends* - Perske & Perske, 1988; *Yes I Can Social Inclusion Program,* Abery, Schoeller, Simunds, Gaylord, & Fahnestock, 1997).

Circle of Friends

The Circle of Friends (CoF) *(Perske and Perske, 1988)* approach originated in Canada in the late 1980s and, while initially developed to support the inclusion of adults with disabilities in their local communities, has been used for years to enhance the inclusion of students with special educational needs in the general education context. CoF is a specific form of PMI with the goal of facilitating the inclusion of students with special education needs through recruiting their peer group as a source of support (Kalyva & Avramidis, 2005). The goals of CoF are to —

- Provide the student with special education needs with opportunities for social interaction to facilitate social skills development,

- Identify challenges the student experiences socially and develop strategies to help overcome them and

- Provide social-emotional and other sources of support to the student with the goal of

helping the to experience a sense of belonging.

The goal of CoF is to provide a pathway for students with disabilities to enter into and become accepted into the school's social networks (Schleien, Green, & Stone, 2003).

Perske and Perske (1988) and Taylor (1997) have outlined a four-phase process of forming a Circle of Friends —

1. **Setting the foundation.** This phase of development focuses on recruiting supportive teachers, providing them with training and committing 30 minutes of their time each week to meet with the Circle.

2. **Recruiting potential peer mentors.** At this phase, supporting teachers meet with a group of typically developing peers they believe might have an interest in serving as mentors to discuss the focus child's strengths and challenges and the responsibilities of serving in this role, and to invite peers to voluntarily participate in the Circle.

3. **Establishing the Circle.** During this phase of development, a group of six to eight typically developing peers who agree to take part in the CoF collaborative problem-solving model and the target student with special education needs is established.

4. **Maintaining the Circle.** Typically developing peers, the focus student and an educator who acts as a facilitator then meet on a once per week basis to review progress, identify challenges and plan ways to solve problems. Working with the group, the target child is encouraged to envision what he or she would like social experiences with others to look and feel like. Goals are identified and actions plans developed through group problem solving to support the attainment of goals.

Qualitative evaluations of the CoF program using case-study methodologies (Calabrese, Patterson, Liu, Goodvin, Hummel, & Nance,

2008; Newton, et al., 1996; Pearpoint & Forest, 1992; Taylor, 1996) and analysis of participant perspectives and impressions (Taylor & Burden, 2000; Whitaker, Barratt, Joy, Potter, & Thomas, 1998) suggest that this approach holds much promise. More formal research efforts related to the program indicate that it has a positive effect on the social acceptance of students with disabilities and enhances their sense of self-worth (Frederickson & Turner, 2003; Noah & Turner, 2003). At a variety of education levels (elementary, middle and high school), the program has been found to support students with disabilities in developing more supportive social networks (Miller, Cooke, Test, & White, 2003). More recently, Schlieder, Maldonado, and Baltes (2014) found that participation in the CoF program facilitated peer acceptance and respect for classmates with disabilities and helped alleviate feelings of fear peers experienced toward such students. Participants reported an increase in peers' understanding of classmates with disabilities as well as increased empathy and understanding for the CoF target student. The CoF fostered true social and psychological inclusion, with enhanced peer acceptance generalizing outside the school setting and fostering long-term friendships.

Yes I Can social inclusion program. In contrast to the unstructured CoF program, the Yes I Can Social Inclusion Program (YIC) is a year-long, structured program for secondary school students facilitated by one or two educators that is intended to be embedded into general education classes or implemented as an after-school club. The goals of the program are to provide students with significant disabilities with the supported needed to access social, recreational and leisure activities of interest and through these interests develop and maintain social relationships based upon mutual choice.

The YIC program is based on the concept that typically developing students can be edu-

cated to serve as effective bridgebuilders for peers with disabilities if provided with appropriate education and supports. The multiphase program is implemented over the course of an entire school year, with students with and without disabilities meeting on a weekly basis to learn from and about each other; to identify, plan for and actively take part in social activities both within and outside of the school context; and to facilitate the development of social relationships. During the initial phases of the program, students take part in a series of activities intended to facilitate their —

- Understanding of disability and disability-related issues: the commonalities that exist between people with disabilities and those who are currently able-bodied;
- The strengths, gifts and capacities they all possess and strategies for identifying barriers to the development of social relationships and their removal or minimization;
- The concepts of universal design for learning and participation;
- Action planning;
- Their common interests and passions.

Typically developing peers subsequently receive instruction as to how they can serve as bridgebuilders for their partner with a disability, helping them access and actively take part in school- and community-based activities that have the potential to serve as contexts for the development of social relationships. Although bridgebuilders often become close friends with their partner with disabilities, they are instructed that their primary role is to remove barriers to participation and support their partner in accessing activities in which they have an interest in participating

Following training, one or more bridgebuilders are paired with a peer with a disability who has similar interests. Over the course of the year, the student pairs work together to access and actively take part in programs and activi-

ties of interest, meet and develop relationships with peers who have similar interests and work to ensure that these relationships generalize to settings outside of their original context. Bridgebuilders receive instruction both with respect to how to facilitate relationships as well as how to fade supports when they are no longer necessary.

The YIC program has been implemented in over 235 schools in the United States and Canada at the middle and high school level. Extensive field testing (Abery & Schoeller, 1997; Abery & Simunds, 1997) has shown that participation in the program increases acceptance and an understanding of disability and disability-related issues on the part of peers; increases the size, emotional closeness/intimacy and quality of relationships that form the social networks of participating students with disabilities; and enhances feelings of social connectedness and belonging among students with special education needs who have taken part in the program. Especially encouraging is that these results held both immediately following and nine months after students had completed participation in the program.

Educator-Led Programmatic Interventions

The peer-mediated social inclusion programs highlighted in this chapter have been shown to improve the social outcomes of students with a wide range of special education needs, but they have a number of shortcomings. First and foremost is that these programs place students with disabilities in what might be referred to as 'vertical' relationships, as recipients of supports. In such relationships, there is the potential for both parties to view the relationship as having a hierarchical structure, where students fail to view each other as equals. A second weakness of such programs is that they do little to change the perceptions of the community in relation to students with special education needs, with

members of this group still viewed as recipients of supports and users of resources rather than as members of the community who can contribute to it in a positive fashion. If social and psychological inclusion is to be realized, effective strategies are needed to alter the attitudes of administrators, teachers and peers toward students with disabilities and the overall school culture (Chamberlain, Kasari, & Rotheram-Fuller, 2007; Cook, Cameron, & Tankersley, 2007). Students with special education needs must be viewed as individuals who have talents, gifts and abilities as well as the capacity to give something back to their school and community. Inclusive service learning, a relatively new approach developed specifically as a support to inclusive education, has the potential to fill that need.

Inclusive service learning (ISL)

Inclusive service learning is a method of bringing together students with and without special education needs and providing instruction and other experiences in a manner that explicitly connects classroom lessons with meaningful service to the community (CNCS, 2007). It promotes students developing academic skills while they serve their communities by addressing genuine needs. ISL includes reflection on both service activities and the skills and knowledge acquired or affirmed during them. Because of the emphasis on active learning in real-life settings, ISL has the potential to reach *all* learners, both because of its explicit academic focus and the extent to which the philosophy of inclusion is integrated into the program. High-quality ISL (*see Figure 2 in the next column*) includes the following features —

Figure 2. Characteristics of High-Quality Inclusive Service Learning

Reflection and integrated learning

A critical component of ISL is that service projects are linked directly to academic objectives in such a way that classroom learning contributes to service, which in turn enhances classroom learning. A key instructional strategy that allows for this approach is the reflection process, in which students are encouraged to understand their experiences through a variety of activities. Reflection can take the form of discussion, journal writing, debate, letter writing or making informational videos.

Problem-based learning focused on significant benefit and genuine need

A key feature of ISL is its focus on learning through supporting students to address real community problems. This approach, drawn from problem-based learning (PBL), involves students working in teams and learning by solving real problems based upon community needs. Teachers function as guides — asking questions, raising issues and ensuring participation.

Student voice

Student 'voice,' an essential element based on the premise that educational outcomes are optimized when students have the opportunity to exercise self-determination (SD) over components of the learning environment and engage in autonomous, self-regulated learning.

Collaboration

One of the hallmarks of effective SL is the use of collaborative, cooperative learning (CL) strategies. CL involves more than students working together on a project: It requires teachers to *structure* cooperative interdependence among students. Elements of CL include positive interdependence, equal participation, individual accountability and simultaneous interaction.

Civic engagement and responsibility

Students today are less likely than in the past to understand the responsibilities if citizenship (Flanagan & Levine, 2010). Civic engagement is therefore a critical aspect of ISL and builds needed social capital (i.e., connections to one's community).
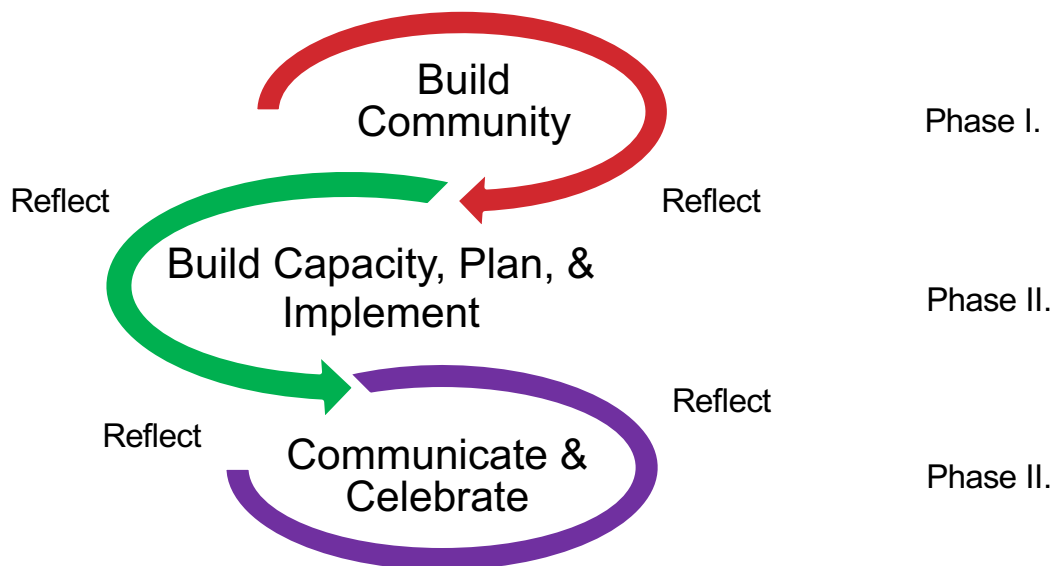
Inclusion and belonging

ISL places an emphasis on embracing diversity by structuring the process to embrace *all* students. By working together to address common problems, students learn about each other, discovering the gifts, capacities and talents each possesses as well as their commonalities.

The *Together We Make a Difference: An Inclusive Service Learning Curriculum,* (Abery, Halpin, Iland, Braun, & Stenhjem, 2012; Vandercook & Montie, 2010) is a year-long ISL program that closely follows ISL Standards for Quality Practice (NYLC, 2008). The structure and sequence of ISL program lessons are based on the characteristics of high-quality SL (Kaye, 2004), and the program is available in both elementary and secondary school editions. The program has a structured format and is intended to be infused into the daily curriculum. Participants learn how to connect with their community; conduct research via PBL; confirm their conclusions; and plan, implement and evaluate ISL projects. The program has three phases —

1. Building community;
2. Building capacity, planning and implementing and
3. Communicating and celebrating (*see Figure 3 below).*

Figure 3. Phases of Service Learning

Build Community — Phase I.

Reflect — Reflect

Build Capacity, Plan, & Implement — Phase II.

Reflect

Reflect — Communicate & Celebrate — Phase II.

Phases are designed to introduce ISL and prerequisite skills in an explicit manner and do not assume that students already possess the ability to undertake effective SL (Neiberger & Zurcher, 2012; Ragsdale & Saylor, 2012). An additional reason for the structure of the curriculum is to promote implementation with high fidelity such that it can be effectively delivered by any high-quality teacher.

Evidence with respect to the effectiveness of the Together We Make a Difference program was generated in a quasi-experimental study in 2008–09 with 14 schools in three U.S. states (Minnesota, California and North Carolina) with over 365 elementary and secondary students taking part (Abery & Halpin, 2009). Results indicated significant pre- and post-test differences between treatment and comparison groups with respect to self-determination, social inclusion and civic responsibility. In addition, although no significant differences in oral reading fluency were reported, both behavioral observation and teacher reports indicated significantly higher student academic engagement among members of the ISL groups, both during ISL lessons as well as other academic subjects. Additional research on SL has demonstrated that it can engage high-risk students; prevent dropout; and facilitate academic achievement, civic engagement and social responsibility (Billig & Grimley, 2008; Dávila & Marie, 2007; Scales & Roehlkepartain, 2005).

Classroom Instructional Strategies to Foster Social and Psychological Inclusion

In the effective inclusive classroom, all students need, on an ongoing basis, to be highly engaged in ongoing conversations with teachers and peers, and teachers must creatively employ a wide variety of participation strategies that encourage active social and psychological inclusion. This has become especially true in countries in which the traditional paradigm of teachers lecturing students has been replaced by a more active approach that focuses on problem-solving and activity-based learning through which students regularly collaborate with each other in small groups. For students with a variety of disabilities (e.g., intellectual disability; autism spectrum disorder), such interactions may not, at first, come naturally, and supports will be needed. Fortunately, there are a number of strategies that teachers can use on a daily basis within the classroom that will increase the likelihood of social and psychological inclusion.

Prepare the class. It is best if classroom teachers assume that their typically developing students have little understanding of disability and how it may impact social interaction. It is also likely that peers will have questions about students with disabilities who are in their classes. Having an honest discussion with students at the beginning of the school year about the specific disabilities of their classmates and debunking or challenging any myths and misconceptions they hold will increase the likelihood of creating an inclusive classroom atmosphere. If the general education teacher does not possess sufficient knowledge of students' disabilities to engage in a discussion with the class, the school counselor or psychologist can be helpful in preparing the group and in discussing the benefits of positive peer relationships.

Set behavioral expectations. At the beginning of the school year and on a regular basis thereafter, it is it important to discuss behavioral expectations with the class and encourage respectful social interaction between students, with and without special education needs.

Utilize cooperative learning strategies

In courses taught in a traditional lecture format, students with and without disabilities have little opportunity to interact and learn from each other. The use of cooperative learning

strategies and problem-solving-based learning approaches in which students are teamed for activities and must share ideas and materials and work together to develop project products provides an opportunity for all students to get to know each other. Such learning teams can be structured such that individual goals are established for each student and all participants have the opportunity to contribute to the best of their ability. In the classroom, avoid competition among students.

Use bridgebuilders

In every class, teachers can typically pick out two or three 'social stars.' These are students who have well-developed social skills and are often at the hub of social networks. Requesting that such students serve as bridgebuilders for their peers with special education needs and support them, when necessary, in social situations increases the likelihood of positive peer-to-peer connections developing and being maintained. The support provided by bridgebuilders not only enables students with disabilities to make a greater number of social connections but supports their ability to effectively respond to social challenges;

Utilize a lunchtime peer support system

The experience of social isolation on the part of students with special education needs is often greatest during nonstructured periods, including lunch time. Establishing a voluntary, rotating lunchtime buddy or support system (especially helpful for younger students) will help students avoid this negative experience.

Support participation in nonacademic school activities

Most schools today have a variety of nonacademic activities (e.g., after-school organizations; choirs and other musical groups in which student can take part). Provide opportunities for students with special education needs to participate in these groups in a noncompetitive fashion (without tryouts or auditions) in extra-curricular activities.

Cultivate personal relationships with students

Connecting informally with *all* students in the class and providing brief, positive feedback (i.e., reinforcement) for appropriate behavior (e.g., "I really liked the way you handled that situation") will support the establishment of positive relationships that increase the likelihood of both students feeling safe and experiencing a sense of belonging in the classroom. This also makes it more likely that students will provide honest feedback regarding their experience at school.

Model respect, acceptance and an appreciation of diversity, including disability

As Kochhar, West and Taymans (2000) suggested, the most important influence on classroom relationships and social acceptance of diversity is the attitude and behavior of the teacher. The degree to which a teacher models acceptance of students with special education needs and treats them in a fair and equitable manner directly relates to the attitudes and behaviors of students.

Summary

In this chapter, readers are introduced to the concepts of social and psychological inclusion, and the case is made for a balanced approach to education that focuses on both academic and social–psychological outcomes. Evidence is provided as to the importance of social–psychological inclusion, and the point is made that students with special education needs often fail to experience a sense of acceptance and belonging when they are included within general education classes. In the second half of the

chapter, a variety of approaches at different levels of the educational system are provided that have been found by research to enhance the experience inclusion. These include efforts to change the culture of schools and student attitudes related to disability so that they are more supportive of the social and psychological inclusion of students with special education needs; programmatic approaches to supporting social–psychological inclusion, e.g. peer-mediated (Circle of Friends and Yes I Can) and teacher-mediated (Together We Make a Difference) programs; and strategies that individual teachers can employ in their classrooms on a daily basis.

Supporting the social and psychological inclusion of students with special needs is a big responsibility for teachers and other educational staff. At times, this aspect of inclusive education tends to get forgotten, given all that must be done to include students with special needs from an instructional standpoint. Thirty years of research, however, suggests that this aspect of inclusive education is just as critical for later student outcomes as its academic counterpart. General and special education teachers, school psychologists, social workers and other school staff must therefore understand and have the capacity to support this part of the inclusive education equation.

Case Study

The sample is taken from 'It's about Inclusion' Access to Education, Health, and Social Protection Services for Children with Disabilities in Armenia, UNICEF (2012).

We are twin sisters Ruzanna and Suzanna from Koghb village of Tavoush region. Despite having many musculoskeletal problems, with the effort of our parents we started going to school. We felt different from other children but were able to overcome the fear of not being understood and being isolated. Studying in a mainstream school, we felt confident, and the wish to be more among people and participate in different activities increased. As years went by, thanks to the attitude of our parents, people learned not to pity and avoid us, but value us as human beings and see our abilities. Our community center, which operates based on the principle that all children are able, played a great role in our life. Using the services of the center, we came to understand that although education has a special significance for our lives, we need the opportunity to interact with a variety of other people. As we participated in center activities, our circle of friends and acquaintances started to grow; we started to see ourselves in a new light, acquiring new skills and abilities. All of this inspired us with greater self-confidence, and we started feeling that, while we are different, we are also equal to all.

Unfortunately, many children with disabilities in Armenia and elsewhere in the world have not had the same opportunities as us. Many do not go to preschool or school, are not engaged in sports and arts, do not have friends, and do not even leave home. It is very painful for us that, because of their disabilities, many children throughout the world are placed in orphanages. Without the love and endless warmth of our father and mother who, despite all of the medical diagnoses and reports of poor prognoses, saw our potential and believed in us, we would be doomed to an isolated and inadequate life. Whereas now, we not only are finishing school, but intend to enter the university and become skilled professionals. It is our wish that for all children with disabilities, the doors of all schools and other facilities are open, so that they, surrounded with warmth and support from their family, friends and acquaintances, are supported to confidently search, find and ensure their place and role in society. We want an accessible environment and a society that is inclusive: academically, socially and psychologically. We want a world free of barriers and discrimination for all of us.

(none)

Tips for Teachers

- Hold daily classroom meetings each morning with students to help build a sense of community and provide opportunities for conversation among students. Ask students to share something of interest they have observed or done with each other during these sessions.

- Provide at least some unstructured time each day when students can practice their social skills with peers and experience feedback.

- Assign a peer advocate or bridge builder to students with disabilities in your class. Support these typically developing peers to acquire the skills necessary to support the social and psychological inclusion of students with special education needs.

- Make sure that on an ongoing basis you observe and reinforce positive, respectful behaviors and social interactions that take place between students in your class, with and without special education needs.

Thoughts for Leaders

- School administrators have the potential to have an enormous influence with respect to the extent that their schools develop an inclusive culture. Modeling inclusive practices and decision-making for students and staff is a critical aspect of this process.

- Working within the context of a team-based approach, school administrators have the capacity to mobilize the resources necessary to create positive change within the school through developing inclusive leadership teams composed of teachers, parents and students. These teams can take the initiative in organizing events and suggesting practices that further the social and psychological inclusion of students with disabilities.

- School leadership teams need to work to ensure that faculty and support staff have access to resources needed to effectively support the social and psychological inclusion of students with special education needs. This includes access to professional development activities as well as programmatic and curricular materials.

Reflection Questions

- What are the similarities and differences between the concepts of social and psychological inclusion?

- Discuss some of the strategies that educators can use to ensure that the culture of a school is supportive of the social and psychological inclusion of students with special education needs.

- What are some of the approaches that research has demonstrated are effective strategies for changing the attitudes of typically developing students toward their peers with special education needs?

- Consider the different programmatic approaches to supporting the social and psychological inclusion of students with special education needs. Taking into consideration the characteristics of students with autism spectrum disorders, select one approach and provide a rationale for why you think it would be supportive of the inclusion of a student with this disability.

Additional Resources

Acevedo, E.V. (2014). *Maintaining an inclusive environment for students with learning disabilities: Taking a look at social inclusion strategies*. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/66992/1/Acevedo_Erika_V_201406_MT_MTRP.pdf

Cara, M. (2013). *Academic and social outcomes of children with SEN in the gen-*

eral education classroom. http://citeseerx.ist.psu.edu/viewdoc/download?-doi=10.1.1.912.3183&rep=rep1&type=pdf

Facilitating social inclusion. University of Virginia College of Education faculty.virginia.edu/ape/LectureNotes/Attitudes-SocialInclusion.ppt

Inclusion of students with special educational needs: Post-primary guidelines. https://www.education.ie/en/Publications/Inspection-Reports-Publications/Evaluation-Reports-Guidelines/insp_inclusion_students_sp_ed_needs_pp_guidelines_pdf

Konza, D. (2008). *Inclusion of students with disabilities in new times: Responding to the challenge.* http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1036&context=edupapers

Maintaining an inclusive environment for students with learning disabilities: Taking a look at social inclusion strategies. https://tspace.library.utoronto.ca/bitstream/1807/66992/1/Acevedo_Erika_V_201406_MT_MTRP.pdf

Social inclusion. https://inclusiveschools.org/category/resources/social-inclusion/

Wang, H. L. (2009). *Should all students with special educational needs (SEN) be included in mainstream education provision? - A critical analysis.* https://files.eric.ed.gov/fulltext/EJ1065757.pdf

Why social inclusion? NBACL. https://nbacl.nb.ca/module-pages/why-social-inclusion/

Glossary

Bridge builder — A person with well-developed social skills at the hub of social networks who serves to link and connect students with special education needs with peers and activities.

Circle of Friends — A form of peer-mediated intervention with the goal of facilitating the inclusion of students with special education needs through recruiting their peer group as a source of support.

Engagement — The extent to which individuals are involved in the activities that they desire and about which they are most passionate. Engagement supports focus, goal setting and the achievement of one's goals. Supporting engagement does not entail all students being treated equally, but rather, equitably, so that each has the opportunity to participate.

Inclusive service learning — A method of bringing together students with and without special education needs and providing instruction and other experiences in a manner that explicitly connects classroom lessons with meaningful service to the community.

Integrated learning — A critical component of inclusive service learning programs, in which the student community service projects are linked directly to academic objectives in a manner in which classroom learning contributes to service, which in turn enhances classroom learning.

Observational learning — Observational learning refers to learning that occurs through observing the behavior of others. It is a form of social learning and takes various forms, based on a variety of processes. Observational learning does not require reinforcement to occur, but rather is contingent upon access to social networks, such as a parents, siblings, friends, classmates or teachers within the environmental context.

Peer-mediated intervention — A strategy through which typically developing peers are trained to interact with students with disabilities and support them in a wide variety of areas.

Problem-based learning — A key feature of inclusive service learning that focuses on students learning academic skills through working collaboratively to identify and subsequently address real community problems.

Psychological inclusion — The extent to which individuals experience a sense of belonging in and out of the classroom during the school day and beyond. It reflects a situation in which all students are considered by others to be full members of the school community and entitled to equal access to social and academic opportunities.

Social inclusion — The degree to which students develop and maintain valued social relationships with peers of their own choosing that are based upon reciprocity, experience valued social roles, and are trusted to perform those roles in the community.

Student voice — An essential element of inclusive service learning based on the belief that educational outcomes are optimized when students have the opportunity to exercise self-determination (SD) over components of the learning environment and engage in autonomous, self-regulated learning.

Valued recognition — Other persons conferring upon the individual and the groups of which they are members the recognition and respect they deserve

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CHAPTER 12:

Supporting the Self-Determination of Students with Special Education Needs in the Inclusive Classroom

Brian H. Abery, University of Minnesota
Lilit Karapetyan, Armenian State Pedagogical University

Self-determination is closely related to the quality of life of children and youth with disabilities and their success academically and later in work settings. Supporting self-determination begins in the family and needs to continue in the school context.

Before reading this chapter, ask yourself the following —
- What unique contribution does self-determination make to the development of students with special education needs?
- What are the differences between personal control, autonomy and self-determination?
- What are the common barriers to self-determination faced by students with special education needs in school and the family?
- In what ways can schools support students with special education needs to develop those capacities that support self-determination?

Introduction

Self-determination is a key educational outcome for all students, with and without disabilities. It increases the likelihood of high levels of academic achievement while in school and of individuals taking part in postsecondary education, succeeding in employment and becoming engaged in the community in adulthood. If they are to be successfully included educationally and within the community, children and youth, regardless of their abilities, must acquire the capacities that allow them to determine their own life courses. All too often, however, children and youth with disabilities receive fewer opportunities to acquire critical skills, knowledge, and attitudes and beliefs that support self-determined life outcomes as well as exercise control over their lives. Parents, teachers — from preschool to postsecondary levels — and peers all have the potential to play a critical role supporting the self-determination of children and youth with disabilities. They can also, however, serve as barriers to achieving this outcome. In this chapter, we explore the concept of self-determination from a developmental perspective, why it is important to *all* individuals, and the myths, barriers and challenges children and youth with disabilities face in achieving this valued outcome. We share evidence-based strategies that educational research has demonstrated have the potential to support the development and refinement

of those competencies supportive of self-determination at home and school. In addition, approaches designed to support the ecology of self-determination via creating environments that provide opportunities and support for it exercise are discussed.

Overview and Background

Self-determination, especially as it applies to persons with disabilities, is a relatively new concept in Armenia. The construct, however, can trace its historical roots back to the English philosopher John Locke, who, in his Two Treatises of Government (1690), suggested that the basic rights of all human beings included their freedom, equality and power to execute their will. When the construct was applied to persons with disabilities in the United States in the 1980s and 1990s, it was within the context of the civil rights and disability rights movements as well as a major push for parent advocacy and the self-advocacy of persons with disabilities. Within this historical context, self-determination, or the right of all persons, including those with disabilities, to control their own lives was quickly embraced as a key factor associated with quality of life. Adoption of the concept within Armenia and its contribution to the educational and community inclusion of children, youth and adults with disabilities may take a bit longer. Because Armenia is a country with a decidedly different history and geography,

it has been only in recent years that a concentrated effort has been made there to protect the rights, including the right to an inclusive education and self-determination, of persons with disabilities. With parent and self-advocacy movements still in their early stages, individuals with disabilities in the country are just beginning to assert their rights to attend inclusive schools, have access to higher education, and experience the advantages of full citizenship, including the right to self-determination.

Given this background, it could be expected that, at least at an individual level, it might take a bit longer for Armenian society and its institutions to ensure that the right to self-determination for persons with disabilities is both respected and protected. The Armenian people, however, have an extensive history in the exercise of *collective self-determination.* Because of the country's strategic location, Armenians have needed to exercise their right to self-determination throughout their history dating back to ancient times. Although only time will tell if this national trait will continue to be exercised, it clearly demonstrates that, in their hearts and minds, the Armenian people both understand and embrace the concept of self-determination. Applying the concept at an individual level and to persons in society who have previously been marginalized (i.e., individuals with disabilities) is the next step to be taken.

What Is Self-Determination?

Since originally conceptualized, a number of different definitions of self-determination have been offered and evolved over time. With their *functional model of self-determination,* Wehmeyer and colleagues (1992) initially posited that self-determination refers to "the attitudes and abilities required to act as the primary causal agent in one's life and make choices regarding one's actions free from undue external influence or interference" (p. 305). In their most

recent writings, Wehmeyer and his colleagues (Shogren et al., 2015) have extended their functional model to incorporate *causal agency theory (FM-CAT)*, and they now define self-determination as a "dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined people (i.e., causal agents) act in service to freely chosen goals. Self-determined actions function to enable a person to be the causal agent in his or her life" (p. 258).

Given its focus on motivation, psychological dispositions and personality psychology, the FM–CAT model has a central focus on the person. Resulting approaches to enhancing outcomes in this area have therefore tended to focus primarily on fostering learning with respect to the skills, knowledge, and attitudes and beliefs that have been conceptualized to support self-determination. These include fostering the development of choice- and decision-making; problem solving; goal setting and attainment; communication, self-advocacy; self-regulation skills; enhancing self-knowledge; an understanding of the service system and one's rights; and supporting the development of an internal locus of control and sense of self-efficacy (Thoma & Getzel, 2005; Wehmeyer & Abery, 2013; Wehmeyer & Schwartz, 1998).

A somewhat different approach to self-determination has been taken by Abery and his colleagues, who developed a *tripartite ecological theory of self-determination* (Abery, 1994; Abery & Stancliffe, 1996, 2003). While acknowledging the importance of individual characteristics, this framework views self-determination as exercised within the context of relationships with other individuals, groups of individuals, or systems and therefore stresses the importance of the environment. The resulting operational definition of the construct conceptualizes self-determination as "individuals exercising the degree of personal control they desire within the context of their relationships with other individuals, groups, systems, or cultures,

over those areas of life that are important to them" (Abery, Tichá, Smith, & Grad, 2017). The model views self-determination as driven by the intrinsic motivation of all people to be the primary determiner of their thoughts, feelings and behavior. Self-determination is viewed as involving, but not synonymous with, independence and autonomy. Rather, it entails the person determining in what contexts and to what extent they desire to exercise control over various aspects of their lives and the degree to which they desire to make efforts to exercise personal control. Self-determination, accordingly, is the product of both the person and the environment — of the person using the skills, knowledge and beliefs at his or her disposal to act on the environment with the goal of obtaining valued and desired outcomes including, but not limited to, exercising personal control.

The *tripartite ecological model* is derived from Bronfenbrenner's ecological perspective (1979, 1989), which views individuals as developing and leading their lives within an ecosystem consisting of four levels: the *microsystem* — the immediate environments in which persons lead their daily lives; the *mesosystem* — the linkages that exist between different microsystems; the *exosystem* — the impact of the larger social system in which a person does not directly participate but whose structures and decisions have an impact on outcomes through interacting with structures at the micro- and mesosystem levels (e.g., decisions school administrators make that impact the amount of time children spend in school on a daily basis); and the *macrosystem* — composed of cultural values, customs and laws. At the macrosystem level of environmental organization, one must consider the overall patterns of ideology and organization that characterize a given society or social group (see Abery and Stancliffe, 2003 for additional details).

As Walker et al. (2011) have noted, the strength of a social-ecological model is that

it is not a deficit, but rather a strength-based approach and does not require the assumption that a student with a disability needs to change or develop additional personal capacities to exercise self-determination. Instead, those skills, attitudes/beliefs and knowledge bases originally conceptualized as 'necessary' for self-determination are viewed as facilitators that facilitate, but are not necessary for, its exercise if one has a supportive environment.

This approach to understanding self-determination embraces the idea that a key factor in an individual being self-determined is their ability to exercise the levels of control they desire with persons and, at times, being willing to voluntarily share or cede control to trusted others, either because control over the areas of concern is not important to them or involves areas of life in which they believe they would profit from the support of others. Self-determination therefore involves a 'goodness-of-fit' between the levels of personal control an individual desires to exercise and those the individual actually does exercise in areas of life that are personally considered to be of importance. This approach also allows for variation in the manner in which the construct is conceptualized in various cultures and the possibility that these differences may result in quite dramatic variance in the absolute levels of control being exercised by individuals who are members of different groups.

In a manner similar to the functional–causal agency theory put forth by Wehmeyer and his colleagues (see Shogren et al., 2017), the tripartite ecological framework for self-determination focuses on children and youth acquiring the personal capacities that facilitate self-determination. These include a variety of *skills* (goal setting, self-regulation, choice- and decision-making, problem-solving, self-advocacy, communication); *knowledge* (understanding one's preferences; rights and responsibilities as

well as how the educational system functions); and *attitudes/beliefs* (an internal locus of control, sense of self-efficacy, internal attributions for success) (Abery and Stancliffe, 1996, 2003; Wehmeyer and Abery, 2013). A key difference between the frameworks emerges here. The functional–causal agency model views self-determination as dispositional and therefore focuses on the direct teaching of skills, knowledge and attitudes, and beliefs supportive of self-determination. The ecological approach, on the other hand, while recognizing the importance of direct instruction, emphasizes what parents, teachers and others can do so that these capacities naturally develop as a result of a child's interaction with a supportive environment.

Myths and Misconceptions Regarding Self-Determination

The concept of self-determination, especially as it relates to children and youth with disabilities, is poorly understood by many professionals in disability-related fields, including education. There is a perception among some that self-determination is synonymous with being independent. This view implies that in order to be self-determined, children and youth should strive to have complete control over all aspects of their lives and that support from others compromises a person's self-determination. Such a myth further implies that self-determination is possible only for people with mild disabilities.

A related misconception is that building strong communication and self-advocacy skills is the prerequisite to exercising self-determination. Such a view disregards the role of the environment in ensuring that people have opportunities to exercise control over as many choices and decisions as possible given the communication skills they have, and the role of support persons in becoming attentive to all the ways, both verbal and nonverbal, that a

person with disabilities may indicate his or her needs and preferences.

A third myth is that supporting the self-determination of persons with disabilities is mostly common sense, and there are no 'best' ways to support its development. Over the past three decades, however, a significant number of research studies have been undertaken to identify best practices in supporting the exercise of self-determination among people with all levels and types of disability. The most important of these practices will be reviewed later in this chapter.

There is a misunderstanding that self-determination is primarily an issue of adolescence. As a result, most efforts in the past at teaching people with disabilities about self-determination have focused on youth and young adults as they transition from school to community living. We now understand that self-determination is an important issue to consider at every life stage. Infants first attempt to gain control over their environment with their cries when they are uncomfortable or need attention. At this phase of life, they are not able to change their situation independently or even directly communicate it to caregivers. However, during the first few weeks after birth, mothers learn to interpret those cries based on the frequency and pitch of vocalizations, whether they develop slowly and build or arrive with full force and a variety of other characteristics, and effectively use them as cues as to whether their infant needs to be held, fed or have a diaper change. There are age-appropriate opportunities for self-determination at every life stage, and each builds on the other.

Current practice in supporting self-determination has moved us beyond such limiting views. Research over the past decades has shown that all people, regardless of disability status or support needs, are capable of and interested in exercising control over some aspects of their lives. It is easy to think that

children and youth with disabilities have more control over their lives than they actually do. Parents and teachers may not realize that the help they provide may at times actually be compromising the ability of children or young adults to have the control they desire in their day-to-day lives. Supporting self-determination is challenging work that requires careful monitoring. Current best practice asks parents and teachers to offer children and youth many opportunities to make choices and decisions about things they care about, and support them, understanding that their preferences matter.

Outcomes Associated with Self-Determination

Although some individuals view self-determination as an outcome in and of itself, we prefer to think of both self-determination and its outcomes as processes that serve as a means to an end. More specifically, to what extent do students with disabilities who are self-determined experience positive life outcomes?

Over the past 30 years, a substantial number of studies have been undertaken to document the impact of self-determination. Research findings indicate that self-determination predicts employment and community access and participation (Shogren & Shaw, 2016; Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Wehmeyer & Palmer, 2003); positive transition outcomes, including higher levels of independent living and the development of positive social relationships (Martorell, Gutierrez-Recha-cha, Pereda, & Ayuso-Mateos, 2008; Shogren & Shaw, 2016; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997); greater access to inclusive residential opportunities *(*Shogren & Shaw, 2016); increased community participation (McGuire & McDonnell, 2008); success in postsecondary education (Anctil, Ishikawa, & Scott, 2008; Getzel & Thoma, 2008); increased quality of life and life satisfaction (Lachapelle

et al., 2005; Nota, Ferrari, Soresi, & Wehmeyer, 2007; Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006); more positive recreation and leisure outcomes (McGuire & McDonnell, 2008) and greater stability in outcomes (Shogren et al., 2015).

Within the school context, the teaching of self-determination capacities has been associated with enhanced academic outcomes (Fowler, Konrad, Walker, Test, & Wood, 2007; Konrad, Fowler, Walker, Test, & Wood, 2007; Lee, Wehmeyer, Soukup, & Palmer, 2010; Shogren et al., 2012), greater success in achieving academic and transition goals (Agran, Blanchard, & Wehmeyer, 2000; McGlashing-Johnson, Agran, Sitlington, Cavin, & Wehmeyer, 2003), and access to the general education curriculum within inclusive educational environments (Lee, Wehmeyer, Palmer, Soukup, & Little, 2008). Research has also demonstrated that individuals of all ages with a wide range of disabilities can be taught the skills associated with self-determination (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Cobb, Lehmann, Newman-Gonchar, & Alwell, 2009) and that supporting acquisition of these capacities creates opportunities for the exercise of personal control (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Wehmeyer et al., 2012).

On a less positive note, research has also indicated that the teaching of self-determination capacities and the provision of opportunities to exercise self-determination in most countries are infrequently included in the education program of students with disabilities (Arnold & Czamanske, 1991; Izzo & Lamb, 2002). In addition, Algozzine, Browder, Karvonen, Test, and Wood (2001) found that interventions to teach capacities associated with self-determination most often focused on students with learning disabilities (LD) in high school or postsecondary settings, and such skills were inconsistently taught to students with other disabilities. As a result, when many students with disabilities

leave the supportive environments of school, they do not understand their strengths, needs and basic rights well enough to explain the accommodations they need beyond school life (Izzo & Lamb, 2002).

The Need for a Developmental Perspective

Self-determination emerges across the lifespan. Newborn infants make limited conscious choices or decisions and can change their environment only with the support of others. At a relatively early point in life, however, they develop the ability to signal (i.e., the infant cry) their caregivers that some change is required in their status. As they acquire the capacity to independently reach for objects, to grasp and let go of them, infants show preferences and make rudimentary choices as they direct their attention toward specific toys and objects in their environment. The ability to move about independently dramatically increases opportunities for choice and decision-making, as the developing infant can now bring into its reach objects that were not previously available for exploration. Shortly thereafter, as more advanced communication skills emerge, the young child becomes capable of stating his or her preferences and, through oral communication and other means, changing the behavior of caregivers, thus exercising direct control over the environment.

During the first several years of life, a child's self-determination is limited to those areas in which parents provide opportunities for choice. However, as the social worlds of young children expand, more and more time is spent outside of the family with peers and substitute caregivers (e.g., preschool teachers). In these environments, moment-to-moment decisions fall under the control of the child, with adults primarily controlling more long-term, consequential decision-making. By the time most children enter kindergarten, control and deci-

sion-making is shared to an even greater extent with adult authorities, if only because a child is spending increasingly larger amounts of time with peers or in a large-group context. What clothes to wear to school, what to eat for lunch, and in which play activities to engage all come under the increasing influence of the developing child.

By the time children reach late childhood and early adolescence, parents and their offspring are truly sharing decision-making authority. Parents increasingly find that they need to 'convince,' 'encourage' and 'motivate' their adolescents because they can simply no longer force them to engage in specific behaviors due to differences in physical stature. Most short-term decisions are now made by youth with input from parents. Although parents still have the final word in decision-making that entails long-term outcomes, young adults are increasingly becoming partners in this endeavor, expressing preferences and providing input.

This gradual transition of decision-making authority from parent to child, although occurring at somewhat different times in various cultures, is relatively universal regardless of ethnic or cultural background or country of origin. The eventual goal of almost all parents is the raising of a self-determined young adult, who at some time in early adulthood has the capacity to make high-quality informed decisions, be economically independent and exercise self-determination. Due to the challenges faced by children and youth with disability, in many cases families never have the opportunity to experience the self-determined young adult. This, however, does not need to be the outcome experienced by children and youth with disabilities and their families. If appropriate steps are taken early in life and supports provided along the way, *all* children have the capacity to become self-determined adults.

Common Barriers to Self-Determination and Self-Advocacy

Given that high levels of self-determination have been shown to be related to positive outcomes for children, youth and adults with disabilities, one might assume that practically all persons with disabilities are supported to be self-determined. Research, however, indicates that this not the case. A substantial number of barriers exist to individuals with disabilities acquiring and refining the capacities that support self-determination, having opportunities to exercise these capacities on an ongoing basis, and experiencing the degree of personal control they desire over those aspects of life most important to them.

Individual barriers

Ecological approaches to self-determination, though focusing on the environment, acknowledge that an individual's capacities, including functional limitations, have the potential to limit a person's exercising personal control. Although we believe that the simple ability to effectively communicate 'yes' and 'no' makes it possible for persons with even the most significant disabilities to exercise self-determination over their lives if provided with adequate supports, all too often such assistance is not available on a consistent basis. Personal capacities, although not *necessary* for the exercise of self-determination and self-advocacy, serve to support these processes when supports are not available or barriers encountered.

Common barriers to self-determination at the individual level include functional limitations with respect to all the skills associated with these processes. These include choice- and decision-making, problem solving, goal setting, communication, self-advocacy, and self-regulation skills. In addition, lack of self-knowledge as well as incomplete understanding of the service system and one's rights as a citizen

and person with a disability have the potential to limit the ability of individuals to speak out for themselves and exercise desired levels of personal control over important life outcomes. Attitudinal and belief systems can also serve to limit outcomes in this area. An external locus of control, low sense of self-efficacy and inaccurate attributions for success and failure can all serve to place individuals at a disadvantage when attempting to assume personal control over their lives (Abery & Stancliffe, 2003).

Ecological barriers

The ecological framework of self-determination acknowledges the dynamic interplay of the person and their environment. Children and youth not only react to their environments, they also play a key role in *creating* them. Put simply, while the environment has an impact on us, our personal capacities, our behaviors and the social capital (i.e., human resources) we have available all contribute to the risks and opportunities we experience at each level of the ecosystem.

There are numerous factors that have the potential to limit self-determination at each level of the ecosystem. At the *microsystem* level, a family's belief that it needs to protect its child with disabilities all too often leads to the child experiencing few opportunities for self-determination and being severely limited with respect to the challenges he or she is able to experience in life. Parents and educators who focus on protection and removing rather than managing risk make it difficult for students with disabilities to have opportunities to exercise self-determination, learn from their mistakes and grow in the process. The *low expectations* of family members and teachers with respect to the outcomes likely to be achieved by children, youth and adults with disabilities also presents a barrier to self-determination (Wehmeyer & Abery, 2013). Parents, teachers and other education professionals all too often assume that

if students with disabilities have not currently mastered a skill (e.g., making choices, self-regulating their behavior), then they do not have the ability to engage in that activity at a later time or within a different context. Opportunities for the exercise of self-determination are thereby limited to what those serving in a support role think a person is able to do rather than what the person might actually be able to do in the future.

Supporting the development of self-determination capacities as well as providing opportunities for its exercise requires positive linkages and relationships across the different settings in which children lead their lives. These *mesosystem* level connections are critical if capacities developed in one context are to be reinforced and generalize to others. The teacher who creates a classroom environment in which self-determination is taught and supported, for example, needs to work with families to ensure that these critical processes are supported at home to support generalization to other environments. Unfortunately, the linkages or relationships that exist for many children and youth with disabilities are either inadequate with respect to their quantity and quality, or simply do not exist at all. An excellent example of this type of barrier is the lack of coordination that all too often exists between schools and families. School personnel on many occasions voice the concern that parents of children with disabilities do not follow through to support schoolwork students are asked to do at home or attend meetings, especially when the student in question is older. A second well-known example is the lack of communication and coordination that often exists because of the school's limited contact with parents and families. When the supports found to be successful in one microsystem (e.g., the classroom) are not carried over to another microsystem (e.g., the family) or when teachers and parents do not agree on the best way to support

a student's self-determination, roadblocks are created.

There are numerous barriers to self-determination that exist at the *exosystem* level. This consists of larger social systems in which the student does not directly function but where decisions are made that have an impact on a child's microsystems (e.g., school or family) or mesosystems (e.g., family linkages to school). The failure of school administrators to provide funding for supports (e.g., educational assistants, teacher training) to facilitate the high-quality inclusion of students with disabilities in general education classes is an issue that serves to limit self-determination in both Armenia and other countries (Caldwell, 2010). In addition, few school districts have made the commitment to offer instruction for students with disabilities that specifically focuses on the development of their self-determination capacities, in spite of research indicating the importance of these capacities to later developmental outcomes (Algozzine et al., 2001; Izzo & Lamb, 2002). A third barrier present in many schools today concerns the lack of access of students with disabilities with limited communication skills to technology supports that would improve their speech and language capacities (Braddock, Hoehl, Tanis, Ablowitz, & Haffer, 2013). For example, a recent UNICEF report (2012) focusing on Armenia indicated that only a small percentage of school-age children in need of assistive devices receive them.

Many exosystem barriers to self-determination for students with disabilities lie in the policies and procedures of agencies and institutions that provide day-to-day supports, including the educational system itself. In some countries, legislation still allows for the exclusion of students with disabilities, or permits placement in segregated schools and institutions. In others, existing legislation concerning educational rights of children with disabilities is not strictly enforced or not enforced at all. Despite ratifi-

cation of the UN CRPD in Armenia in 2010, in many areas, public school administrators are still refusing to admit students with more significant disabilities. In the absence of daily contact with typically developing peers, the self-determination of students with disabilities is stunted. The manner in which educational support and service planning is undertaken and services provided to students with disabilities is also often a barrier to self-determination because it continues to be professional centered rather than child and parent centered. Rarely are students and parents actively involved in setting short and long-term educational goals or encouraged to offer input into intervention programs. Individualized educational plans, for all but students with mild disabilities, remain focused on functional skill development, with interventions most often taking place outside of the general education classroom. A final exosystem-level barrier to self-determination is the lack of family and disability representation in those agencies and ministries that set the agenda for the provision of education and evaluation of the quality of supports students receive (Caldwell, 2010; McDonald & Raymaker, 2013).

The *macrosystem* refers to the values and ideology of a culture and the patterns of organization that characterize it. In many countries, societal attitudes with respect to persons with disabilities remain ableist in their orientation. *Ableism* refers to 'discrimination in favor of able-bodied people.' In reality, however, its impact extends beyond literal discriminatory acts to the way a culture views people with disabilities. Both practices and dominant attitudes in society continue to devalue, marginalize and limit the potential of persons with disabilities. Many of these forms of discrimination are normalized and integrated into a culture's very understanding (or, more accurately, disregard) of the experiences of persons with disabilities. Campbell (2009; 2008) and others (e.g., Dunn & Andrews, 2015; Hehir, 2005) suggest that

ableism extends beyond literal discriminatory acts to the way a culture views people with disabilities as individuals who need to be fixed and who do not have the capacity to function as full members of society. Having a disability is therefore viewed not as a dimension of difference and diversity but as a defect. This ideology permeates all levels of the culture and has a tremendous negative impact on a wide variety of factors that serve to support the self-determination of persons with disabilities. The lack of knowledge among most professionals and parents regarding self-determination, limited funding available for school- and post-school self-advocacy groups for youth and adults with disabilities, the restricted interest of educational systems in incorporating self-determination curricula into their programs, and the decreasing opportunities for self-determination students face as they mature in our educational system all limit the opportunities of children and youth with disabilities to develop personal capacities in this area.

Recommendations and Practical Interventions to Support Self-Determination

Over the past several decades, a number of formal programs have been developed and field tested to support the exercise of self-determination on the part of persons of all ages with IDD. It should be noted, however, that based on the existing research literature, a wide variety of informal, nonprogrammatic recommendations can also be made that have the potential to support the development of those skills, knowledge bases and attitudes and beliefs that support self-determination in the family, school and community contexts. Regardless of whether programming is formal or supports are of an informal variety, current best practices can be best summarized by the statement, 'start early and provide as many opportunities as possible.'

Individuals and families

During early infancy, children begin to engage in intentional behavior and, in a rudimentary way, initiate the process of self-determination. Infants quickly develop different types of cries that vary in frequency, amplitude and the manner in which they are presented — building slowly or emerging very quickly. In a very short time, mothers develop the capacity to differentiate one cry from another. Is the infant hungry, needing to have its diaper changed, or just be held and provided with social stimulation? Learning an infant's cries and responding to them quickly allows children, even at very young ages, to understand that they can control or cause specific outcomes through their own actions (Donovan & Leavitt, 1989).

Within the first year of life, infants begin exploring their world. As they mature, the context of this exploration becomes both wider and more varied. Families can facilitate the development of capacities associated with self-determination through supporting their child's interest in exploring his or her environment and the objects within it (Odom & Wolery, 2003). This can be accomplished by making the environment a safe place in which to explore and populating it with a wide variety of 'high interest' objects. This experience will naturally lead children to develop preferences for specific activities, games and toys over others, initiating a process through which they begin to understand their likes and dislikes, those things they prefer and those which are of less interest (Shogren & Turnbull, 2006).

A logical next step in the development self-determination capacities involves simple choice-making with a limited number of alternatives. As early as 12–18 months, children display a desire to control their environment, including the food, activities, toys and other objects to which they have access. Providing simple choice-making opportunities consistent with personal capacities, but that also chal-lenge children while supporting them to assess the consequences of their choices, facilitates not only good choice-making but the development of goal setting, self-regulation and problem-solving capacities. This can be accomplished both by parents within the home and within the preschool setting. At home, parents can offer children choices of a limited number of healthy foods from which to choose at meals as well as clothing choices when they get a bit older (e.g., "Which of these three shirts do you want to wear?").

The preschool setting provides excellent opportunities for children to make choices with respect to the activities in which they most desire to engage as well as the need to, at times, compromise and acquiesce to the preferences and choices of peers and the authority of the teacher. This context also allows for teachers to begin to provide students with opportunities to engage in group decision-making in which every child has an opportunity to state his or her preferences, but where consensus needs to eventually be achieved. As verbal skills develop, families and teachers can support the self-determination of children with disabilities via fostering their learning to articulate their preferences, providing both the structure and support they need to express their likes and dislikes as well as, when needed, the accommodations necessary to enable those with emerging communication skills to develop alternative ways of expressing preferences.

The ability to regulate one's behavior to achieve personal goals is a critical part of self-determination. Whitman (1990) referred to self-regulation as a capacity that supports persons to take into consideration their situation, the goals they desire to achieve, and behaviors they have available to address the challenges they are likely to face in working toward these goals, and to develop plans about both how to act and to evaluate the efficacy of their efforts. Through supporting the acquisition of

language skills on the part of children, parents and teachers can facilitate the development of external and internal speech, both of which are critical to the development of self-regulation capacities. Once children formally enter school, another opportunity exists for those who support the child by encouraging goal setting. This can be accomplished both by encouraging students to set a variety of short (i.e., daily), medium-range (i.e., weekly or monthly) and long-term (3–6 month) goals for themselves and then providing them with a way to monitor progress toward those personal goals, offering necessary supports along the way.

After studying many families, Baumrind (1966) described three types of parenting styles: authoritarian (high demand, low responsiveness), permissive (low demand, high responsiveness), and authoritative (balance between demand and responsiveness). The *authoritative parenting style* has consistently been found to predict greater self-reliance, responsibility, independence, and autonomy (Baumrind, 1972; Baumrind & Black, 1967) and to most effectively support the development of capacities for self-determination in children and youth with disabilities (Abery & Zajac, 1996; Booth & Kelly, 2002). Including children in choice-making about what the family will eat for a meal through providing several alternatives of healthy food combinations, having older children conduct research on potential places where the family might go on vacation and encouraging them to take part in decision-making discussions, supporting children and youth in decorating their own bedrooms to reflect their preferences, and encouraging them to both articulate their preferences and provide a rationale for their thinking with respect to a variety of family decisions — these are all simple ways that parents can support the acquisition of capacities associated with the exercise of self-determination in adulthood.

A typology parallel to that of Baumrind's can be applied to teaching styles, with the continuum ranging from educators who provide little opportunity for students to exercise control during the school day (authoritarian), to those who have tenuous control over their classes (permissive). An *authoritative style of teaching*, in which structured opportunities for choice and control are embedded into the daily routine while the teacher retains veto power, provides the chance for children and youth to develop a sense of self-efficacy and self-confidence with respect to their self-determination capacities. Asking a group of preschoolers with which activities they would like to start the day, providing the class or small group of students the opportunity to select which book from among an array of 3–5 they would prefer to read, supporting students to select the mode of assessing their academic progress that they most prefer (multiple choice exam, essay exam, paper), having the class rather than the teacher decide on rules for behavioral decorum in the classroom, and facilitating older students to develop action plans for the writing of a paper or other assignment — these all serve to support the development of skills that will facilitate self-determination. An important caveat at this juncture is to provide support only when needed.

As the child becomes an adolescent and moves toward early adulthood, parents must not only provide opportunities for increased decision- and choice-making authority via the use of authoritative parenting but, within reason, allow their son or daughter to make decisions in increasingly important areas of life and, on some occasions . . . to fail, to make bad decisions and have the opportunity to learn from them. Decisions that don't necessarily work out the way an individual intended provide the opportunity to learn more about one's preferences, strengths and challenges and the need to consider long- as well as short-term

consequences when making decisions, setting goals and planning for the future. It is also critical at this phase of life to ensure that the opportunities for choice- and decision-making that individuals have available are age appropriate and in areas of life that the individual views as important (Wehmeyer & Abery, 2013) regardless of the persons' support needs.

System and program level supports

Developing the capacity to exercise self-determination is a lifelong process. It begins shortly after birth and continues throughout life. At the programmatic level, a number of interventions have been developed to support the self-determination of students with disabilities of all ages. Program and system-level supports have aimed at both increasing opportunities for self-determination and ensuring that individuals with disabilities develop the capacities supportive of this outcome.

The *self-determined learning model of instruction* (SDLMI) of Wehmeyer, Palmer, Agran, Mithaug, and Martin (2000) is one of the most widely researched models of instruction developed to support the self-determination of youth with disabilities. Through activities and learning designed to support students becoming self-regulated learners, the program facilitates young adults developing goal setting, choice- and decision-making, self-advocacy and other personal capacities supportive of self-determination. In numerous field tests of the SDLMI (e.g., Agran et al., 2006; Lee et al., 2008; Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012; Shogren, Plotner, Palmer, Paek, & Wehmeyer, 2014; Wehmeyer, Palmer et al., 2000), students with disabilities receiving SDLMI instruction were found to demonstrate enhanced personal capacities supportive of self-determination, meet or exceed expectations with respect to their academic and transition goals and goal attainment, experience greater access to the general education cur-

riculum, demonstrate significant increases in opportunities for self-determination, and have teachers who developed higher perceptions of student capacity. Palmer and Wehmeyer (2003) adapted the SDLMI for K–3 students and have also found promising results with that age group.

During their childhood, youth, and young adult years, individuals with disabilities need access to experiences and opportunities that facilitate the continued development and refinement of those individual capacities (skills, knowledge and attitudes/beliefs) supportive of self-determination. In most cases this means the need to support ongoing opportunities for self-determination, with respect to both the exercise of desired levels of personal control on a day-to-day and on a long-term basis (Wehmeyer & Abery, 2013). Utilizing person-centered approaches to educational support planning (COACH; Giangreco, 1996; Giangreco, Cloninger, & Iverson, 2011; O'Brien & Mount, 2005; Pearpoint, O'Brien, & Forest, 1993; Smull et al., 2005) and delivering educational supports in a person-centered manner are critical aspects of facilitating self-determination. Providing the opportunity for the student to determine who attends his or her educational planning meeting and to voice preferences and desired life outcomes with respect and honor from others, and giving assurance that supports are directed not only at what is important *for* the student, but also focus on what is important *to* him or her, provides the opportunity for the direct exercise of self-determination as well as the refinement of skills supportive of this process. One of the most powerful opportunities for young adults to exercise self-determination in the school context is to provide them with the chance to direct their own educational planning meetings with supports as necessary. When implemented in the intended manner, serving in this leadership role enhances self-determination by promoting greater personal choice and

control, and supporting goal setting, self-advo-cacy and problem-solving skill development.

The families of most students with disabili-ties, though supportive of their child or youth exercising self-determination, have limited ex-pertise in how to facilitate this outcome. Abery and colleagues at the University of Minnesota's Global Resource Center on Inclusive Educa-tion have developed and field tested several family-based educational programs designed specifically to assist parents in acquiring the capacity to better support the self-determina-tion of their child or youth with a disability. The family self-determination education program (Abery, Eggebeen, Smith, Rudrud, & Arndt, 2000) is a 14-module program designed to sup-port parents and families to better understand self-determination, advocacy and self-advocacy; learn to advocate for their child or young adult within the educational system; and incorpo-rate ongoing opportunities for the exercise of self-determination into the daily family routine. The program, which has been extensively field tested with families of youth with intellectual and physical disabilities, helps parents learn how to support the developing goal setting, problem-solving, choice/decision-making, and self-advocacy skills of their children and youth.

In an attempt to reach a greater number of parents, youth and young adults, especially those in rural areas, the University of Minne-sota's Research and Training Center on Com-munity Living has recently developed an online self-determination education and support program for families of persons with intellec-tual and development disabilities. Delivery of instruction is based on a tele-health model in which 4–5 families link up via the Internet with a facilitator from the comfort and privacy of their homes on a biweekly basis for six months. The curriculum covers a variety of ways families can support the developing self-determination of their member with a disability and includes units focused on —

- Disability self-awareness and identity,
- Choice and decision-making,
- Facilitating self-advocacy skills,
- Navigating the educational and service sys-tem,
- Setting and working toward personal goals,
- Supporting self-regulation capacities, and
- Understanding and planning for life transi-tions.

Classroom and family supports

There is a wide variety of activities and sup-ports that teachers can provide within the classroom and for parents at home that have the potential to facilitate those personal capac-ities that encourage self-determination. The most important is to ensure that students have ongoing opportunities for both individual and group choice- and decision-making over the course of the day and are allowed to experi-ence, within reason, the consequences of the choices and decisions they make. Providing opportunities for choice and decision-making can start with simple choices for young children (e.g., which of two shirts to wear) and proceed to more complex decision-making as students acquire the skills to make informed decisions in various areas of life. Within the context of *class-room and family-based choice- and decision-mak-ing*, adults in the child's life can —

- Talk through the decision-making process with children before a choice or decision is made to ensure that all options have been explored and potential consequences con-sidered. After a decision has been made, students can be encouraged to reflect about how they made their decision and how they feel about it;

- Provide advance notice to children of choic-es that will become available in the near fu-ture. Asking children to think out loud about their alternatives and, if they are limited, en-

couraging them to develop others will help students learn to turn limited choice-making opportunities into situations in which they are able make decisions that are of importance to them;

- Teach children to identify choice and decision-making opportunities themselves, demonstrating the many choices available in various settings.

Supporting student *goal setting* is a second strategy that can be used to facilitate the development of self-determination capacities. Educators and parents can support the development of skills in this area through —

- Setting academic, social and behavioral goals with, rather than for, children and having students write down their goals;
- Supporting students to create step-by-step plans of what they need to do to reach their goals, making sure they consider the resources that will be needed and those that are available;
- Providing students with the opportunity to post their goals and track progress toward them. These will serve as a reminder to students to continue to work on goals they have set for themselves.

Most children and youth find themselves in multiple situations with adults and peers in which they need to advocate for their choices, decisions and viewpoints. Educators can support the development of *self-advocacy* skills through —

- Refraining from speaking for students and instead encouraging them to articulate their own thoughts, needs and desires;
- Providing a good role model for children through demonstrating effective and respectful advocacy with both adults and students;

- Supporting children and youth to advocate not only with their peers but, when needed, with those in authority;
- Working with students to facilitate their developing effective advocacy plans. This can involve talking through a plan on a step-by-step basis, e.g., formalizing an advocacy goal, deciding with whom to advocate and developing an advocacy strategy.

Students with and without disabilities need to learn to regulate their own behavior and take responsibility for their actions. *Self-regulation skills* and *accepting personal responsibility* for one's choices and decisions are therefore capacities that all students need to develop. At home and in the classroom, teachers and parents can help children learn to —

- Identifying the short- and long-term consequences of their behavior, both on self and others;
- Developing step-by-step action plans that will help them progress toward their goals, including —
  - » Specifying short- and long-terms goals,
  - » Assessing one's current status in working toward those goals,
  - » Identifying existing and needed resources and behaviors to progress toward goals,
  - » Planning first steps and
  - » Monitoring progress toward goals;
- Making corrections with respect to their behavior when current approaches are not assisting them in achieving the outcomes they desire.

Self-determination is facilitated not only by the skills a child or youth possesses, but through a students' *self-awareness* and *self-knowledge*. Teachers and parents can help children learned themselves in a wide number of ways, including —

- Talking with students about their disabilities in an honest, straightforward manner. The

focus should not be just on the challenges they face, but the personal capacities they possess and how their strengths can be used to overcome challenges;

- Teaching students about their basic human rights and specific rights as students with disabilities, in both the school and community under the UN Convention for the Rights of Persons with Disabilities (2006) and additional national legislation;

- Encouraging children and youth to try different activities and search out additional experiences to challenge themselves. Stress to students that we often learn more about ourselves when we face adversity and need to problem-solve than when we experience easy success.

The *attitudes and beliefs* that support self-determination are grounded in students developing an *internal locus of control* and learning that it is their behavior that generally determines the outcomes they experience. Students with special education needs often experience less success than their peers without disabilities, have parents and teachers who set low expectations for them, and receive messages from significant others that they are 'inferior' or 'broken' and need to be fixed. Such experiences facilitate dependence and an external, passive focus. The development of a set of attitudes and beliefs supportive of self-determination is facilitated by —

- Providing feedback that is, overall, positive in nature and takes into consideration not only the success students achieve but the effort they make in developing a solution and their persistence;

- Offering corrective feedback that does not solve a student's problem for him or her but facilitates the child or youth arriving at their own effective solutions;

- Setting appropriate, but high, expectations and standards for students with disabilities and holding them to those standards;

- Finding contexts in which students with disabilities can use their personal skills, gifts and capacities;

- Avoiding sending messages to students that will potentially lead them to attribute their challenges and struggles to internal-stable factors (i.e., their disability) and successes to external-unstable factors. Messages that do exactly the opposite and focus on student success as a result of skills, gifts and personal capacities are much more likely to result in the development of attitudes and beliefs supportive of self-determination.

Hayk's Story: A Case Study of Self-Determination

When he was born, Hayk's parents failed to notice anything unusual about their son. Taking him home from the hospital, they had the same dreams as most parents for their son. However, within weeks their world changed dramatically as their infant started to experience severe seizures on an almost daily basis. After several months of unsuccessful treatments, neurologists were able to at least partially control the seizures with medication. Hayk's developing brain, however, had been significantly injured. His parents were told by medical personnel that their son had an intellectual disability and would experience limited language development, probably never learn to read or write, and need ongoing care and support.

Hayk's parents, Mher and Hranush, had a difficult time accepting their son's prognosis. It was clear he had a disability, but they were not about to give up on him this early in his life and began working with specialists to support his development. By the time Hayk entered school, his speech and language skills, though behind his peers, had developed quite well, and he had

acquired a number of prereading skills. Though the special pedagogues at his school pushed for a segregated program, Hayk's parents convinced them that, with support, he would do well spending at least part of his day in a general education classroom. This was accomplished through Hranush reducing her job to a part-time basis and serving as her son's educational assistant while he was in mainstream classes. It was not only academics, however, on which Hayk's parents concentrated. They wanted him to be independent, make his own choices and hopefully someday be able to live on his own.

Mher and Hranush started with small things, such as responding immediately to Hayk when he attempted to get their attention, always having toys and other interesting objects available that he could explore and providing him, even when he was 2 years of age, with structured choice-making opportunities. When he made choices and decisions that didn't reflect his preferences, they allowed him to experience the consequences, and he quickly learned to make different choices the next time a similar situation arose. One of the things Hayk was very opinionated about was the food he ate, and his parents allowed him a good deal of decision-making authority in this area. By the time he was 8 years old, however, they agreed that along with his opportunity to make decisions, he needed to learn that when he did so, he must assume responsibility for them. As a result, when Hayk informed his parents that he did not like the food they were serving for a meal, he would need to learn to cook a healthy alternative, at first with support, but eventually on his own. Hayk's parents were surprised at the speed at which their son learned to cook. Though he had a difficult time reading recipes, after making a meal a few times, he knew exactly what ingredients he would need and how much to use. What he especially loved to make were salads of all types, from simple to complex.

By the time Hayk reached eighth grade, his parents started thinking about what he would do following school. Sitting down and speaking with their son, they asked him to think about what was most important to him in a job — what would make him happy and the types of tasks he thought he could do well. Over a period of months, his parents took him to visit a variety of businesses in the city. During each trip they took photos of what the workers were doing and of Hayk in the setting. At the end of the year, the family reviewed the experiences their son had at each business and, after looking through the photos together, asked him to pick four potential jobs that they would further investigate. Hayk indicated that he liked to cook, be around people, and stay busy, and that he much preferred a job in which he did not have to arise early. Two of the potential jobs he had selected would have required him to start work early, so these were quickly eliminated. Of the other two possibilities, the one that intrigued Hayk the most was becoming a chef. Luckily, his uncle owned a restaurant at which he had dined many times. After Hayk's parents spoke with his uncle, an agreement was reached for him to work on weekends as a part-time salad assistant. He would be paid based upon how much work he completed. As he learned more about salad making at his job, Hayk became more confident, not only about his ability to make an excellent salad, but his skills interacting with customers, taking on more complex tasks, and possibly living in the community. Two years after starting his job, Hayk was so successful that he was promoted to head salad chef. His current income allows him, with some help from his parents, to share an apartment with a co-worker who befriended him at his job. On a day-to-day basis, Hayk now makes almost all his own decisions. In some areas, he exercises total control; in others (e.g., financial decisions), he asks for the support from

those whom he trusts, and in a small number of areas he defers to his parents.

What did Hayk's parents do right that led to the development of a self-determined young man who has made great progress in becoming independent and being responsible for himself? Probably the most important thing they did was to begin to offer their son opportunities to exercise control over his life, early and often. The choices they offered were based upon his skills at the moment, but also challenged him so that new skills were developed and refined. As Hayk developed, his parents offered him greater opportunities to exercise control over his life, gradually moving from parent control, to shared control, to their son making most of the decisions in his life with support from trusted significant others. Along the way they also taught him that along with self-determination comes responsibility. In addition, Hayk's parents made some other important decisions that supported his self-determination, including —

- Not making assumptions about what their son's eventual capacities would be early in his life,
- Teaching him about his rights within the Armenian social service system and how to advocate for them and
- Ensuring that he had continued contact with peers without disabilities in inclusive environments who could serve as role models.

Hayk's parents made sure their son had continued opportunities to observe his non-disabled peers interacting in a self-determined fashion and avoided developing the expectations many parents have for their children with disabilities.

Tips for Teachers

Choice Making

- Use visuals such as pictures, icons or words to help students make choices and decisions. Visuals are an effective way to process and understand information. Pair language with visuals, and students may find it easier to understand choices being offered.

- Limit the number of options made available to children at one time. Provide two or three options when children are first learning to make choices.

- Give students the chance to choose different options other than those presented. As children become more skilled at choice-making, allow them to choose alternatives that you don't initially provide as options.

- Be supportive when students make decisions, providing positive feedback or appropriate incentives. Initially support all student attempts at decision-making

Goal Setting

- Support the student to provide input on long-term goals. Involve students in the development of their individualized learning plans, especially in the goal-setting aspects.

- Use visuals to help children see the progress they are making toward their goals. Use simple charts, graphs or other visual aids that children can help complete.

- Encourage students to set goals that are challenging but realistic for them to achieve within a reasonable time frame;

- Create time schedules: Break larger projects down into their component parts and create a schedule of when each step is due.

Responsibility

- Talk with your students about the importance of responsibility and how it relates to self-determination. Discuss with students

why it is important to be responsible for your actions, choices and decisions.

- Use a calendar, chart or other aid to help children keep track of their responsibilities. This will enable them to understand upcoming responsibilities as well as those already completed

- Give your students classroom responsibilities on a daily basis. Small tasks that can be completed in a short period of time on an ongoing basis can significantly enhance a child's sense of responsibility.

Autonomy and Independence

- Avoid being overprotective. Allow students to challenge themselves . . . to sometimes fail, and learn from their mistakes.

- Provide opportunities for students to exercise their independence in class and school. When students desire to do something independently, provide them with the opportunity to do so. When support is necessary, provide only the minimal amount needed after being requested to do so.

- Work with students when creating schedules for the school day. Find our when, with whom and how students would prefer to do things, and honor these preferences whenever possible.

- Remember that a student's capacity for responsibility grows quickly. The level of responsibility a student is able to assume can change greatly over a short period of time. Do not assume that just because a student did not act responsibly on one occasion that this will reoccur in the future.

Self-Advocacy

- Teach self-advocacy skills in a step-by-step fashion. Do not move on to a new step until students have mastered previous ones.

- Encourage students to advocate for themselves and others. Emphasize the importance of speaking up for oneself in an asser-

tive manner. Encourage students to clearly express their wants, needs and feelings.

- Reinforce all attempts at self-advocacy, even when students are not successful. Make sure students understand that often, first attempts at self-advocacy do not solve problems and that they need to stand by their convictions and may need to advocate multiple times with multiple people.

Self-Regulation

- Talk with students about how their personal actions will determine if they reach their goals. Ask students to identify a specific goal, generate potential plans for reaching it, and then monitor their progress.

- Talk about how consequences can sometimes be unintended, including their impact on others.

- Support students to think about how well the behaviors in which they have engaged helped them reach their goal and what they would do differently next time.

Self-Awareness and Self-Knowledge

- Work together with students to develop a list of their formal (protected by law) and informal rights. Then ask them how much they know about each of these rights.

- Have students develop a group resume. Provide opportunities for students to write down their own strengths and for classmates to add to this list, using a small-group format. Ensure that for every strength a student lists for himself or herself, they list one for each other member of the group.

- Evaluate outcomes and personal goals. When students make decisions and choices, ask them to evaluate how well their decisions helped them reach desired outcomes.

Thoughts for Leaders

It is clear from the topics discussed in this chapter that we have come a long way in the past 25–30 years in both acknowledging the rights of persons with disabilities to self-determined lives and providing them with the supports to make this vision a reality. Looking to the future, however, it is clear that we still have a long way to go, as societal and cultural barriers to self-determination still exist. Educational leaders have the capacity to both work directly with children with disabilities to support self-determination within the context of the school day and with parents to ensure that it is reinforced at home. School administrators set the tone for what happens in their schools and classrooms. Ensuring that teachers have the training, capacity and support to teach in an authoritative manner and providing students with opportunities to be involved in both day-to-day decision-making in the classroom and in the development of their individualized plans will support the desired outcome of a self-determined young adult.

Additional Resources

What is self-determination? The Center for Self-Determination. http://www.centerfor-self-determination.com

Stories of advocacy, stories of change from people with disabilities, their families, and allies, 1988-2013. Feature issue of *Impact.* https://ici.umn.edu/products/impact/271/271.pdf

Health care directives. Honoring Choices Minnesota. http://www.honoringchoices.org/health-care-directives

National Gateway to Self-Determination. http://www.ngsd.org

National Resource Center for Supported Decision-Making. http://www.supporteddecisionmaking.org

Self-Advocacy Online (2012–present). http://selfadvocacyonline.org

Self-determination and self-advocacy for people with intellectual and developmental disabilities. (2016). Retrieved from https://rtc.umn.edu/nationalgoals/#self-determination-advocacy

State of the science: *Theories, concepts, and evidence guiding policy and practice in community living and participation for people with intellectual disabilities*. (2012). Retrieved from https://rtc.umn.edu/sosc/

UNICEF (2014). Partnerships, Advocacy and Communication for Social Change, Webinar 7 and Companion Booklet 7. *Series of 14 Webinars and Companion Technical Booklets on Inclusive Education*. Geneva, Switzerland: Author. Retrieved from: Retrieved from https://www.ded4inclusion.com/inclusive-education-resources-free/unicef-inclusive-education-booklets-and-webinars-english-version

What is self-determination and why is it important? Retrieved from http://ngsd.org/news/what-self-determination-and-why-it-important

Glossary

Ableism — Discrimination in favor of able-bodied people.

Causal agency — Being a causal agent in one's life, an individual makes choices regarding his or her actions free from undue external influence or interference

Choice — Selecting an option from among one or more alternatives.

Decision-making — A multistep process in which a person first creates a set of alternatives based upon individual goals and then selects from among the options developed.

Ecology of human development — Ecological models include an evolving body of theory and research concerned with the environmental conditions that govern the lifelong course of human development with a focus on interactions that occur between the individual and all levels of their ecosystem.

Exosystem — The larger social systems in which a person does not directly function, but where decisions are made that have an impact on development through their effect on microsystems (e.g., school or family) or mesosystems (e.g., family linkages to school).

Internal locus of control — The belief that one's personal actions generally determine the outcomes they experience.

Macrosystem — The values and ideology of a culture and the patterns of organization that characterize it.

Medical model — Emerging from the growing knowledge about the human body during the Renaissance period, the medical model views disabilities as human weakness or 'medical misfortune.' Services were often geared toward returning the person to 'health' or making him or her more 'normal.'

Mesosystem — The linkages and relationships that are developed by the individual and their family across the different settings in which students lead their lives. Both the quality and quantity of these linkages have the potential to have an impact on developmental outcomes.

Microsystem — The immediate behavioral settings in which development occurs, including the family, school and peer group.

Self-advocacy — Speaking up for oneself when needed to ensure that one is treated in an equitable manner.

Self-determination — Individuals exercising the degree of personal control they desire within the context of their relationships with other individuals, groups, systems or cultures, over those areas of life that are important to them.

Self-efficacy — The belief that one can successfully carry out the behaviors necessary to reach a goal. A person's sense of self-efficacy ranges from low to high based upon previous learning experiences.

Social capital — The human resources persons have available to support them in reaching their goals.

Systems change — Changes in organizational culture, policies and procedures within or across organizations that enhance or streamline access and reduce or eliminate barriers to services needed by a target population.

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CHAPTER 13:

Inclusive Early Childhood Development Programs: Opportunities for Promoting Effective Transition to Schooling

Elizabeth Criswell, LeAnne Johnson, Sheila Williams Ridge, & Charissa O'Neill,
University of Minnesota

Araksia Svajyan, Armenian State Pedagogical University

Alvard Poghosyan, UNICEF Armenia

The time between birth and age eight offers a critical opportunity for understanding needs and thoughtfully redesigning the physical, instructional, and social environments to maximize learning for young children.

Before reading this chapter, ask yourself the following —

- What types of services and supports are available for young children who have a disability or developmental delays before they start primary school?
- How is information gathered to determine what types of services and supports will be most beneficial to meeting the needs of an individual child?
- Once a child's needs are identified, what kinds of changes to the child's environment should be considered to facilitate their learning and development?
- What strategies exist to help ensure that effective services and supports implemented in early childhood will continue into primary school?

Introduction

This chapter focuses on early childhood development (ECD) as a crucial phase of an individual's growth and development because experiences during early childhood influence outcomes across the entire course of an individual's life. For all children, early childhood provides an important window of opportunity to prepare the foundation for life-long learning and participation, while preventing potential delays in development and disabilities. For children with disabilities or developmental delays, it is a vital time to ensure access to interventions that can help them reach their full potential (WHO–UNICEF, 2012). Policies and practices in ECD and transition to primary schooling for children with disabilities in the United States will be presented as well as some reflections on the Armenian context. Each country has a unique approach, and each is at a very different stage in their work with young children with disabilities.

In this chapter, the term *early childhood development* is used to stress that a child's development happens in a variety of settings (community-based centers, home, educational and health facilities) and involves a wide range of activities and service providers that need to work together for ensuring the physical, cognitive, linguistic and socioemotional development of a child. Based on the UNICEF definition, ECD refers to a comprehensive approach to policies and programs for children from birth to eight years of age as well as their parents and caregivers (UNICEF, 2014). ECD encompasses a number of distinct sub stages, each of which presents particular needs. It should be noted that from country to country, those sub stages and the definition of ECD may differ; however, in general, the following stages are important in terms of interventions —

1. Pregnancy and perinatal: prenatal care, attended births, registration, postnatal care;
2. 0 to 3: parent education, early stimulation and nutrition interventions, home-based care, nurseries;
3. 3 to 6: parent education, preschool or kindergartens;
4. 6 to 8: transition to formal education, improved early primary school.

In the United States, though federal laws have required publicly funded schools to provide educational services to children with disabilities for over 40 years, far less time than that has elapsed since those same laws applied to children younger than school age (Odom, Buysse, & Soukakou, 2011). When the federal laws extended to younger children, new opportunities emerged to create systems for supporting families, caregivers and educators. Today, there is a system of care for young children with disabilities and their families that includes —

- A federal mandate for Child Find (IDEA, 2004), a program that prioritizes localized efforts and procedures for finding children with disabilities and offers supports,
- A means for families and caregivers to identify and seek support when they suspect a child might have a developmental delay or disability, such as the Help Me Grow National Center (https://helpmegrownational.org)
- Federal rules for identifying and providing early intervention services in homes for infants and toddlers (ages 0–2) or in structured early childhood programs for preschoolers (ages 3–5).

Given findings that early intervention may provide a positive impact (Richter et al., 2017), the observed increase in the number of children receiving early intervention services (U.S. Department of Education, 2016) is a valued outcome of the system of care created by the federal laws.

Though increasing the number of children receiving early intervention services is important, it is not sufficient for ensuring improved outcomes for children and families. In an effort to improve the short- and long-term outcomes for young children, the U.S. Department of Health and Human Services (HHS) and the U.S. Department of Education (USDE) jointly drafted a policy statement calling for increased, meaningful high-quality inclusion opportunities for children (HHS & USDE, 2015). This policy statement explicitly calls for early childhood programs to include children by "intentionally promoting participation in all learning and social activities" (HHS & USDE, 2015, p. 3). As educators enact this policy, they are changing service delivery models to set the context for participation in meaningful learning in inclusive environments. Reports from the Office of Special Education Programs (OSEP, 2016) showed that approximately 66% of preschoolers now received some special education services in regular early childhood programs, up from

42.5% in 2012 (U.S. Department of Education, 2016). Though attendance in an inclusive program is an important start, promoting learning for children with disabilities within those environments involves educators in thoughtfully selecting and implementing practices that augment an existing high-quality program. A number of evidence-based classroom and interaction practices are available to support the learning and development of children with disabilities within inclusive environments (Barton & Smith, 2015).

Since 1991, the Government of Armenia has made various legislative efforts to revitalize forms of early childhood education (ECE), initially with a focus on kindergartens, which traditionally were the key modality for ECD in Armenia during the Soviet era. Specifically, the kindergarten organizational provisions ensured comprehensive services in early learning, health, nutrition and protection of young children. Three key ministries regulate provision of services to young children, including children with disabilities: Ministry of Education and Science (MOES) is responsible for early learning, Ministry of Health (MOH) is responsible for health, nutrition and development programs; and Ministry of Labor and Social Affairs (MOLSA) for child protection and care. Children who are ages 0–7, including those with disabilities, are eligible for the following state funded services —

- Access to kindergartens and psychological-pedagogical support.
- Health care services and rehabilitation for children up to seven years of age, children with disabilities above the age of seven and children in orphanages and state-funded residential care institutions;
- Rehabilitation devices, prostheses and orthopedic accessories are provided free of charge to children with disabilities. These include such things as hearing devices, voice

- creation devices, eye prostheses, wheel-chairs, corsets, etc.;
- Day care and rehabilitation services through state partnership programs implemented by various NGOs and state-funded centers;
- Medical-social examination for disability determination and certification of the status of 'disabled child';
- Monetary allowance for all who get the status of 'disabled child.' The Government of Armenia approves the amount of allowance every year;

Based on a report from the World Bank (SABER, WB 2012), Armenia has an emerging environment with strong national laws and regulations guaranteeing the provision of essential ECD services and a framework for multisector collaboration. As mentioned above, programs are established in all essential sectors with high levels of coverage in the health and nutrition sector. Universal coverage and equitable access for the eligible population in all essential sectors, for example preschool education or rehabilitation services, is yet to be achieved.

In 2005, the government adopted the Law on Preschool Education, followed by the development and adoption of the 2008–2015 Strategic Program for Reforms in Preschool Education. Both documents promote equal opportunities for all children upon entry to school and envisage that all children will have a strong foundation for adaptability and development of their social and personal skills. According to the Law on Preschool Education (2005), children have the right to preprimary education that may be provided by preschool institutions, both public and private, or organized in the family (SABER, WB 2012). However, preschool education is not mandatory in Armenia, and the preschool enrollment rate was only 29% in 2017 (NSS, 2017). Accessibility to affordable and quality preschool education for all 3 to 6-year-old children is an issue due to scarci-

ty of resources, inconsistencies in regulatory frameworks and simply absence of meaningful services, especially for children with disabilities. The revision of the Law on Preschool Education was initiated in 2017 with the aim of including specific provisions for improvement of the quality, affordability and availability of preschool education services, with a focus on increased enrollment of the most disadvantaged children: children living in poverty, in remote rural areas and children with disabilities. Since 2000, international organizations and local nongovernmental organizations (NGOs) implemented several pilot projects targeting access to kindergarten of children with disabilities and provision of rehabilitation services in child development centers. However, due to financial and regulatory gaps, currently only a few kindergartens officially offer inclusive education.

The remainder of this chapter will describe an early childhood program in the United States and the experiences of those leaders, teachers and families as they provide inclusive learning experiences for young children. Where relevant, the Armenian experience will be presented to help understand how policies influence practice in different country settings.

About the Shirley G. Moore Laboratory School Model

At the Shirley G. Moore (SGM) Laboratory School at the University of Minnesota, the curriculum reflects current best practices in cognitive, social, emotional and physical development. Children learn through experiences that match their developmental stage in an environment where they have warm, nurturing relationships. The Lab School aims to spark children's sense of wonder, curiosity and delight in learning while helping each child build knowledge and a framework for academic concepts.

Each classroom is staffed by one lead teacher and two to three teaching assistants, who

are often university students working toward a teaching license. The lead teacher remains with the children through the entire school year, and the university students rotate every 15 weeks. The adult-child ratio is generally 1:6. All lead teachers have master's degrees, are highly knowledgeable of child development, and are experienced in working with young children in classroom settings.

Each classroom emphasizes math, literacy, science and social studies lessons embedded in daily play activities at school. This includes ample child-directed free play supported by teachers for about two thirds of the school day, including child-directed play indoors and outdoors. The other one third of the day is spent in more teacher-directed activities, such as small group, large group, snack time and transitions. Teachers are given flexibility in their environment and curriculum design to best meet the needs of the children in their class. Each classroom space and curriculum may vary greatly based on the needs of the children enrolled. Each day, children are given access to every space and activity, including indoor and outdoor spaces.

Inclusion is a prominent and important component of the program. The children with delays or disabilities play and learn alongside their peers who are typically developing. Individualized education is an important facet of the approach, and by offering inclusive environments, the school maximizes the benefits of seeing each person as a unique and complex individual in the world. All children learn to take this perspective with them to school and beyond, such that they may become members of a society where citizens have a deeper understanding of the unique assets of each individual. All families can benefit from inclusive programming as well. Many families appreciate that their children have opportunities to interact with their peers and learn about the differences and similarities between them. In

an inclusive setting, all children have the opportunity to develop deeper understandings of each other and learn empathy and kindness, as well as how to persevere through difficulties and conflict.

The success of the Lab School's inclusive model relies on working collaboratively with early childhood special education teachers who can offer specialized services to children while they attend the program. The administrative team works each year to develop a contract for services with local school districts. These contracts include a variety of services that are needed by individual children and allow school districts to secure spaces for enrolling children from their school district that they believe would be best serviced in an inclusive environment like the Lab School. Families are given options for their child's placement and receive a tour of the school before deciding if it is the right placement for their family. The Lab School also welcomes private providers into the classroom to provide a variety of services to help children succeed. These services are most often nursing and intensive supports for children with more complex special needs but whose social-emotional goals can be met in an inclusive environment.

In Armenia, support services for children with disabilities or developmental delays are carried out spontaneously, without any planning and supervision. Almost no work is organized for children ages 0–3 with developmental delays and disabilities at preschool educational institutions, as provision for this age group is limited or nonexistent. Health facilities continue to be the main source of service provision for this age group, with focus on early screening of newborns to identify and address child disability, immunization, provision of free medical and rehabilitation services for children with disabilities and promoting public education to address malnutrition among children.

Interventions for children ages 3–6 having developmental delays and disabilities are sometimes carried out, but inefficiently. The reasons for these inefficiencies include —

- Absence of multidisciplinary teams at pre-school educational institutions or absence of community-based services;

- Limited access to preschool institutions and rehabilitation centers;

- Lack of training programs for general peda-gogues to work efficiently with children who have developmental disorders and disabilities;

- Insufficient guidebooks and tools necessary for understanding how to work with children who have developmental disorders and disabilities.

Due to the above-mentioned factors, pre-school-age children with developmental delays and disabilities are often formally enrolled in preschool educational institutions that are not able to offer them meaningful participation (Svajyan, 2011). These problems are addressed by some child development centers and non-governmental organizations that provide multidisciplinary services such as psychologists, speech therapists, special pedagogues, art therapists, physiotherapists and occupational therapists that can contribute to the development of children. Great progress in the development and socialization of these children is observed when they have access to specialized services. In addition, smooth transition of children to mainstream preschool education institutions and primary schools afterwards is being doc-umented, in which children demonstrated a higher level of preparedness for primary schooling.

Still, it should be mentioned that the ab-sence of cooperation between preschool education institutions and support services hinders the socialization and inclusion of young children with disabilities. Currently, support services that are provided to a young child with a disability or developmental delay are often fragmented and irregular. By increasing oppor-tunities for cooperation between institutions and support services, individual plans may be developed that maximize a child's opportuni-ties to learn and develop.

Identifying Children's Needs

The following vignettes are examples of how the needs of individual children may be identi-fied in different types of environments. The first two, featuring Omar and Matthew, are from the Lab School at the University of Minnesota, and the third, featuring Mari, is from a program in Armenia. These vignettes are examples of how the school staff will take pertinent informa-tion about children as individuals and use that information to craft a variety of supports and interventions on a case-by-case basis. Omar's vignette details how classroom staff often play a role in identifying when children may ben-efit from special services. Matthew's shows how staff can gather and implement strategies when an area of need has been determined prior to enrollment. Mari's reveals how the careful identification of needs and appropriate interventions to address communication and cooperation challenges were essential for her transition to school.

Omar

Omar started at the SGM Laboratory School when he was two years old. His mother stated that it took him a long time to start making sounds, but he did imitate sounds and only stopped if he became frustrated. This early in-tervention was key in getting his speech started and helping his family understand and navigate the special education services provided in Min-nesota.

Throughout Omar's first year at the Lab School, his teacher built a relationship with

him and his family. Together they looked at his growth over the year. When evaluating his expressive language skills in the middle of the school year, his teacher noted that he used gestures when communicating with peers and adults more often than he used verbal language. She also noted that he mumbled and his sounds ran together, making him difficult to understand. By the end of his first year, they began a conversation with his family about having him further evaluated for additional speech services.

Omar was a friendly, outgoing child, and though he was speaking, he was experiencing challenges in being understood by his peers and adults. When Omar returned for his second year, his family decided to have him assessed for special education services. Omar's evaluation concluded that he had difficulty with certain sounds, especially blended letters such as *sh* or *th*, and that he stuttered, which impacted his fluency. On the first evaluation, Omar could be understood about 37% of the time. He was found to stutter on about 14% of his words, especially when speaking in conversation or phrases, but no stutter when naming items with a single word definition. The stuttering negatively impacted his classroom participation. Therefore, he qualified for up to 10 hours per week in an inclusive educational environment (the Lab School) and 45 minutes of speech and language services per week due to his articulation and fluency assessment. Omar continued to receive those services in the Lab School. To support his growth, the speech and language pathologist also provided 30 minutes of indirect services per month, which included time to collaborate with teachers and his family to demonstrate communication strategies and help design a curriculum to aid him in communicating with others.

Matthew

Matthew started at the SGM Lab School when he was three years old. However, he had been receiving special education services since infancy. He was diagnosed with Down syndrome (trisomy 21) at birth and immediately qualified for early intervention services in his home. A home visiting team from his school district visited once a week to provide developmental supports to Matthew and his family (including speech, physical and occupational therapies). This is a common service delivery model in Minnesota for children under the age of three who qualify. When Matthew reached the age of three, his school district considered a variety of possible early learning settings that would be appropriate for Matthew's needs, including segregated classrooms, a combination of pull-out and regular classroom, and inclusive classroom. After identifying inclusion as a possible fit for Matthew, his mother and father visited several different programs before identifying the SGM Lab School as their preferred placement for Matthew.

At the SGM Lab School, the education staff does several things to ensure that the school year begins successfully for all children. Home visits are conducted so that the general education teacher has the opportunity to meet with each student and family and observe meaningful aspects of their home life. Similarly, children are given the opportunity to visit the classroom and meet future classmates. This is a particularly useful tool when learning about children's unique developmental needs. Because Matthew's strengths and needs were already identified, the general education teacher was able to ask his family specific questions about what accommodations might be helpful as he transitioned to a classroom at the Lab School. In addition to his individualized education plan (IEP), which outlined his targeted learning goals for the school year, the teacher was able to learn about Matthew's individual interests,

personality traits and preferences to inform her preparations for the school year.

Mari

Four-year-old Mari, a girl with autism, was attending a kindergarten. Mari didn't respond to her name, didn't speak, didn't obey instructions and liked rolling toys. She could roll them for hours, accompanied by unintelligible vocalizations and excessive movement of hands. Mari did not participate in any classes, as she was not interested in them, and the pedagogues could not raise her interest and ensure her participation or interaction with peers. In fact, during her time in the kindergarten, Mari played alone in a corner, and the pedagogues were unable to include her in any activity carried out by the group. Some extra professional work such as psychological support, speech therapy and special pedagogical services was carried out with Mari at the Arev Development Center in Yerevan, both in group and individually. The professional support promoted the development of Mari's cognitive interests and her communicative and cooperation skills. She began to respond to her name and obey simple instructions, and she became interested in other toys such as cubes, dolls and animals. This intervention created favorable conditions for Mari's smooth transition to, and meaningful participation in, the kindergarten.

Bringing Together a Team to Plan Needed Supports

The delivery of inclusive learning opportunities for young children at the SGM Lab School involves the participation of both the Lab School staff and the early childhood special education staff of our local, publicly funded school district. The specialists include early childhood special education (ECSE) teachers, speech-language pathologists, occupational therapists, physical therapists and other specialists as needed (e.g.,

vision therapists, feeding therapists, deaf and hard of hearing specialists, autism specialists). These specialists may visit the Lab School as often as once a week or as infrequently as once a year. They may work directly with children and provide guidance and assistive learning materials to the classroom staff to use when they are not in the classroom. The specialists are also responsible for tracking children's progress according to the goals and objectives set out in their individualized education plan (IEP). Occasionally, one-to-one supports are also provided by the school district when children require more intensive assistance to be successful in the inclusive environment.

The Lab School classroom staff work closely with the public school district staff to support the learning objectives outlined in each IEP. As they help individual children learn the skills identified in their IEP, they embed that learning within their support of children's more global development. They also seek to understand and identify areas of strength, particular interests and priorities of the child or family. To ensure that there is adequate support for the Lab School staff and that individual children are making progress on their learning objectives, the team of staff from both the public school district and the Lab School meet with the child's family at least twice per year to collaboratively make plans and coordinate everyone's work.

Arranging an Inclusive Environment That Supports All Children's Learning

When creating early learning experiences to meet the needs of all young children, it is important for teachers to thinks about the physical, instructional and social environment of the classroom and school (Sandall & Schwartz, 2009). When school leadership and classroom teachers consider these aspects of the learning environment, they not only ensure that the

classroom is arranged in a supportive manner for all children, but are also able to be intentional about supports that individual child may need. A helpful approach for establishing a supportive environment is to view the space from the perspective of the children in the classroom (Kaiser & Rasminsky, 2017). Taking information from an IEP and initial meetings can help a teacher think about what might be confusing, frustrating or overstimulating. Conversely, teachers can include things that may feel welcoming, calming or engaging. The two vignettes from the Lab School will be used to provide examples of the opportunities to raise awareness and demonstrate cooperation with assisting specialists.

Physical Aspects of the Environment

Teachers examine the physical arrangement of the classroom to identify areas that can either support or hinder learning (Sandall & Schwartz, 2009). For example, teachers may need to space furniture out so that a child using a walker or wheelchair can move successfully without interference. Similarly, a teacher might decide to include motor equipment in an open area of the classroom to support a child's jumping and climbing needs. There are many ways that the physical environment may be arranged to maximize the success of all children while including children with more specific needs. Organizing the classroom space into areas in which children know the types of materials and activities that will take place in that area provides predictable routines that facilitate children's learning. Providing a wide array of learning materials within those areas helps to emphasize different domains of development, such as art materials, sensory materials, dress-up clothes, building blocks, books, puzzles and natural materials, and it ensures that all children will be able to find engaging activities. It is important to offer both materials that children may find challenging as well as materials that are familiar

or more easily mastered. This creates a space where children can seek out new activities but also avoid overstimulation and frustration. With this type of foundation in place for the physical arrangement of the classroom environment, the teachers are then able to consider other specific accommodations that may be helpful to individual children.

When discussing physical environment and accommodations in the kindergartens of Armenia, it should be mentioned that there are a number of challenges in this area, including physical accessibility of the buildings for children using a walker or wheelchair and a lack of resources for ensuring reasonable accommodations, such as fixtures for moving, for feeding, and the provision of visual and auditory aids. When discussing universal design for learning or access to information such as graphics, pictures or pictograms to promote the child's perception of information, it should be noted that in this sphere, there are many opportunities. Simply put, it is very important to raise the pedagogues' awareness and to ensure the cooperation with assisting specialists. Two examples from the SGM Lab School are provided to help Armenian pedagogues consider new approaches.

Omar

Once Omar's skills had been evaluated, there were very few physical adaptations to be made in the environment to create new opportunities for him to practice needed skills. The Lab School classrooms have a wide variety of learners, and many universal design for learning guidelines (http://udlguidelines.cast.org/) are regularly implemented. The teachers made sure that there were a variety of different types of learning areas arranged in the room to create different options for Omar to practice his verbal expression. This included having picture schedules, photos and labeled items around the room that could be used for 'talking prac-

tice.' The teachers also ensured that there was a planned time for Omar to practice engaging with his peers and adjusted the schedule to allow him to have his one-on-one services before the school day began.

Matthew

Before Matthew's first day of school, the teachers already had useful information from the team that enabled them to make decisions that would best support Matthew's success in the classroom. For example, it was stated by Matthew's mother that he found transitions to the next activity particularly challenging. Matthew's teacher understood that this is a common challenge for many young children. To address this need for Matthew as well as many of the other children, the teachers made sure that the areas around the classroom and materials within the different areas were organized and made available in predictable ways. To support this, they created a schedule for the daily classroom routines so that transition times would become more predictable for everyone. The schedule outlined the different components of the day using photographs of the actual school environment to create a concrete representation of the daily experience. This schedule was posted in several areas around the classroom and shown to all the children during the first days of school. One of the schedules was posted next to Matthew's personal belongings cubby so that he could see it easily and even review it each day on arrival at school. Having the predictable schedule and the variety of learning areas in the classroom were also important for accommodating Matthew's high levels of fatigue and frustration. The low muscle tone that accompanied his trisomy 21 made many fine and gross motor activities tiring for Matthew. Similarly, his days were often filled with private therapies (physical, occupational and speech) before and after school. Therefore, the predictable and organized classroom environment allowed him to make more choices about activities in socially appropriate ways and avoid frustration.

Instructional Aspects of the Environment

Instructional aspects of the learning environment include temporal arrangements such as the length and sequencing of different activities, the routines and procedures that make the environment predictable and familiar to children while they engage in high-quality and developmentally appropriate activities, and the staffing plans that effectively facilitate activities, transitions and high-quality interactions with children (Sandall & Schwartz, 2009). Example of such rules that create a familiar environment are illustrated below *(see Figure 1)*.

Figure 1. Classroom Circle Rules
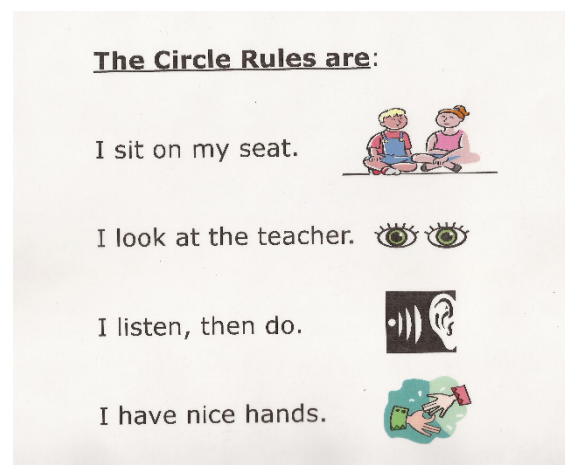
In Armenia, this is an emerging area with limited capacities and training opportunities available for preschool teachers and specialists within donor-funded projects. The procedures and methodologies for adjusting the instructional aspect will be developed after adoption of the revised Law on Preschool Education. Meanwhile, teachers are required to follow child-centered pedagogical approaches that foster differentiated instruction. It is very important for preschool pedagogues to develop capacities to organize the educational process

of children having developmental disorders, to plan and implement individual activities, to regularly monitor a child's progress, and to develop professional capacities. The country is moving to the introduction of assessment of educational need based on the International Classification of Functioning, which definitely will contribute to the enhancement of needs-based instructional support in kindergartens. Two examples from the SGM Lab School are again provided to help Armenian pedagogues consider new approaches.

Omar

The design of the classroom instructional routines allows for well over half of the day to be guided by the children's own choices about activities. For Omar, this allowed him to follow his interests throughout much of the classroom and outdoors. He was able to spend time engaging with materials and peers in small groups and in one-on-one interactions within activities that were of his choosing. According to Staskowski et al. (2012), "Inquiry based learning activities provide a low-threat environment where students can apply prior knowledge, explore new concepts, and develop ideas about the essential questions" (p. 116). As the team learned about Omar's interests, his speech and language pathologist was able to spend time in the classroom helping him to practice words and interactions that would help him more fully engage in learning activities and interactions with peers and adults throughout the day.

As they understood his needs, the teachers allowed opportunities, especially during large and small group time, for Omar to engage in conversation. They took time to let him respond, which helped increase his occasions to practice and gain confidence. According to one of his teachers, "He was successful because of the relationships he had with the teachers and others in the school. He was truly heard without being completely understood verbally." In-

creasing Omar's opportunities to practice needed skills was also facilitated through intentional staffing plans. The ratios of adults to children in the Lab School classroom allowed time and space for teachers to check in regularly with Omar to ask questions, assess his understanding and facilitate interactions during play with his peers. These check-ins allowed Omar's team to continually assess his progress towards his goals and plan ways to scaffold his learning.

Matthew

The individualized paradigm of the SGM Lab School approach helped his teachers make a number of decisions that immediately supported Matthew's success in the classroom. As previously outlined, the instructional environment is designed to accommodate children's individual interests and ability to sustain attention in certain types of activities. Thus, as Matthew navigated the classroom, he was able to approach different materials and activities that were meaningful and motivating for him, such as the dramatic play area, which was one of his favorites. This created a learning space that minimized frustrations and maximized his participation throughout the day. As the year progressed, Matthew showed interest in expanding his play into a variety of other areas or joining in with more adult-structured learning experiences. He would try a new experience for brief periods before returning to a preferred activity in the classroom.

Matthew's teachers learned that they could intentionally sequence activities to ensure that a more challenging activity was followed by a more preferred one *(see Figure 2 on page 216)*. This sequencing of the activities helped motivate Matthew to engage in activities that were important for his learning, while also providing a helpful break and rest period, given his developmental needs. To allow the sequencing of activities to be more understandable and predictable for Matthew, his team developed vi-

sual schedules for "first — then" and used brief activities with a clear beginning and end (e.g., putting together a puzzle or sorting a set of colored beads) to help Matthew know what was needed to complete one activity before moving on to a more preferred activity. Additionally, this was a useful strategy for other children who were also acquiring new skills or practicing the integration of different areas of development (motor, cognitive, social and emotional). Balancing challenging tasks with more familiar and/or strength-based ones helps all children stay actively engaged throughout the learning day. Further, enhancing the visual schedule that illustrates the overall daily routine with other forms of visuals that support participation within activities and transitions between activities helps all children easily understand and predict learning as it unfolds.

Figure 2. Example of a Visual Schedule "First – Then"

First

Listen to the story

Then

Motor Room
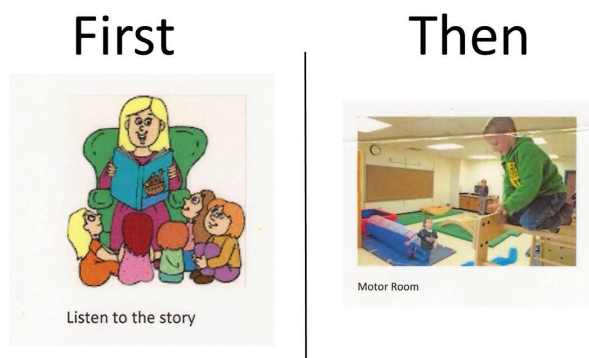
Social Aspects of the Environment

Social aspects of the learning environment focus on supporting and promoting interactions involving children, teachers and families by considering the groupings of children, the way activities are arranged, and how materials are selected and made available (Sandall & Schwartz, 2009). There are a number of ways the SGM Lab School provides universal supports for the social aspects of the learning

environment. There is a high focus on promoting adult to child and child to child interactions that support the social and emotional development of all the children. This leads to each individual receiving instruction and support to understand the many complicated aspects of connecting with others and resolving conflicts. Teachers work to connect with all the children in the classroom in meaningful ways. Their relationships with individual children are viewed as the foundation upon which all developmental progress is built. With that foundation, teachers actively support emerging social relationships through play experiences in the classroom and outdoors. The teachers also view interpersonal conflicts as a means of learning new social skills and building deeper relationships. Taking time to get to know and fully understand each child is imperative for delivering the individualized care and instruction that helps children continue to learn and grow.

When discussing social adaptations in the kindergartens of Armenia, it is clear that the achievements in this field are comparatively noticeable. Children attending kindergarten have opportunities to build social relations with their peers as well as with adults, many of which the pedagogues are able to promote. This, of course, contributes to the social and emotional development of children with developmental disorders and their smooth transition to primary school (Svajyan, 2014). In addition to the two examples from the SGM Lab School, Mari's story from Armenia is also presented below to highlight how current provisions for social aspects of the school environment may have a positive impact.

Omar

Omar's team made sure that all teachers were informed about the goals for his skill development and met regularly to plan tactics to scaffold his learning. Staskowski et al. (2012) noted, "What makes UDL different from some

other learning frameworks is the emphasis on planning ahead, or front-loading the curriculum with assistive supports" (p. 115). The Lab School director, who provided a check-in each day, engaged Omar in conversation each morning. This created a predictable learning and practice opportunity for Omar and included having Omar talk with the director and other teachers about things he was working on, which his speech pathologist would remind him of and prepare him to talk about. This helped other teachers to recognize opportunities to practice skills as they naturally occurred during the day. The teachers were also intentional about promoting interactions between children, but specifically between Omar and his peers. Arranging buddy play that partnered children for brief play sessions and organizing small groups with children who were good language models for turn-taking and sharing activities created opportunities that were particularly helpful for Omar to practice skills and build confidence with his peers.

Matthew

A number of universal adaptations were useful for Matthew's success in the social environment. The staff ratios and positioning of staff around the environment were particularly beneficial to promoting interactions for Matthew. Given that Matthew's spoken language was sometimes difficult to understand and that he sometimes did not understand the symbolic or pretend play of his peers, adult supports provided some communication interpretation for the peers, and prompting and modeling for Matthew helped to improve his interactions with peers. Sometimes, teachers would also arrange for a small group of children to take a story they had read as a whole group and use it to act out an event from the story in the dramatic play area with Matthew. This not only helped to reinforce the concepts and language from the story but also created a common ex-

perience on which the children could base their interactions. With supportive adult interactions, Matthew not only had more opportunities to develop his own skills, the rest of the children also had opportunities to develop empathy and appreciation of differences that may have otherwise resulted in exclusionary play practices.

Mari

After a year of center based special education services, Mari started attending an inclusive kindergarten. The pedagogues spent time teaching Mari how to talk with her peers and, through repeated practice, how to follow the classroom routines. With that practice, Mari learned to participate in the group activities without shouting or spontaneous voices. She could sit with children in a circle, to do greetings and answer to the peers' questions with the help of preschool teachers. She started to understand feelings of other children and show empathy towards them. Mari also joined children during lunch and observed social rules of eating with a fork and spoon. She even replicated those achievements in her community and family life. Mari could go to supermarket with her mother and follow the expected behaviors while walking through the store, including choosing something she wanted her mother to buy and, with help, explaining why she wanted her mother to buy it. With adults teaching her the skills and offering repeated practice, Mari also started to play with her brother at home and share toys with him.

Targeting Interventions to Support Specific Needs

As teachers grow to know children better throughout the year, they often notice that some areas of the classroom might be better structured to meet each individual's needs in a more targeted manner. Despite the thoughtfulness of the universal strategies, many chil-

dren will also benefit from more targeted and individualized supports that span the physical, instructional, and social aspects of a classroom. These supports can often be employed with smaller groups of children or woven into the typical learning experience for one individual (Sandall & Schwartz, 2009). They are interventions targeted to meet specific needs, but they do not necessarily cause children to be removed from the learning experience. As Armenian pedagogues continue to strive for providing more differentiated interventions to support the specific needs of certain children, a series of examples are presented below for Omar and Matthew of the SGM Lab School to provide ideas about new ways to provide targeted and individualized supports to Armenian children.

Targeted Interventions with Physical Aspects of the Classroom

Omar

Some physical supports in the classroom environment helped Omar stay engaged and fully participate in the classroom experience. During group learning times, Omar was often seated next to one of the classroom teachers. This enabled him to have support in expressing his ideas and gave him quick reinforcement for his attempts as verbal expression. Other intentional adaptations of the environment, in addition to the UDL guidelines, included having songs that were repeated each day and consistent routines and materials that created opportunities for the teachers to provide repeated practice with certain words to aid in communication and understanding.

Matthew

Some targeted interventions proved to be useful for Matthew during his preschool experience. For example, busier times of day were challenging for Matthew. When there were several peers in the same space, Matthew was frequently distracted, and it was difficult for him to complete the necessary task at hand. This became particularly noticeable when it was time for him to dress to go outdoors. In order to facilitate this process so that Matthew was successful and able to become more independent with his dressing skills, the teachers moved the area for his personal items from the middle of the group to the end of the group. This enabled him to move off to the periphery of the group while dressing was occurring.

Targeted Interventions with Instructional Aspects of the Classroom

Omar

During speech and language work, vocalization, pronunciation and enunciation can be difficult to hear in a classroom with lots of background noise. Small group interactions were an important part of scaffolding Omar's learning at the Lab School. He was able to gain confidence with the same group of children over several weeks as they explored something of mutual interest. As new vocabulary was introduced, he was supported by his teachers and speech and language pathologist to help him gain mastery.

Matthew

Several targeted instructional practices helped Matthew continue to develop and expand his skills. For example, his IEP listed turn-taking and following directions as goals for his learning throughout the school year. In order to provide focused time for him to expand upon these skills, the classroom teachers created games that included his favorite subjects: superheroes, monsters and animals. A teacher would partner with Matthew twice a week to practice these skills in the context of the highly

motivating games. This activity also included classmates, so that Matthew's turn-taking skills were worked as naturally as possible into the usual classroom experiences.

The teachers also employed several instructional supports to help Matthew during the difficult transition experiences. One tool that was especially useful for Matthew was an individualized, interactive picture schedule *(see Figure 3 below)*. In addition to the universal schedule of the daily routine posted for all the children, the teachers created individual schedules for Matthew that he could carry with him to different activities and that broke some of the larger tasks of the day into smaller, more manageable, pieces. The teachers used Matthew's interest in monsters to create different monster visuals that Matthew could affix to the schedule after each task was completed successfully. For example, he could stick a mummy next to the clean-up task after he had finished putting away five toys. This was a way to help Matthew organize challenging parts of the day and still feel motivated by his own interests. Additionally, teachers would often structure routines so that Matthew would be the first person to engage in them. By allowing Matthew to be the first person to wash his hands or select a game piece, they knew he would be able to focus on the task at hand without the added distractions of peers around him.

Figure 3. Matthew's Interactive Picture Schedule
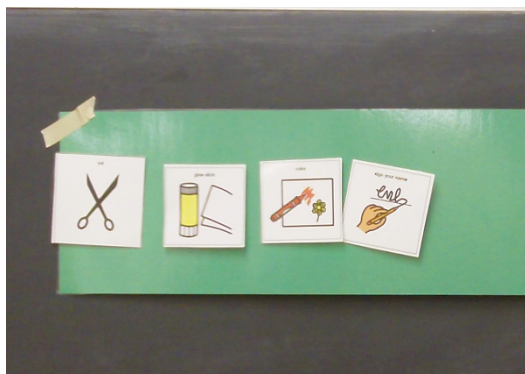
Targeted Interventions with Social Aspects of the Classroom

Omar

The social environment in the mixed-age classes allowed Omar opportunities to interact with children over a variety of ages (3–5 years), and the inclusive setting provided opportunities for him to engage with children from a variety of strengths and challenges. This environment allowed him to engage in frequent conversations and opportunities for sharing his thoughts. He occasionally became frustrated, but by the end of his second year had improved in his articulation; he was able to use other words that he knew were more easily understood and was able to speak with confidence, even telling stories to small groups of children.

Matthew

One important aspect of the individualizing done at the SGM Lab School is its focus on children's assets as well as their challenges. Just as children's specific interests can be motivating for their learning, so too can their areas of strength. For Matthew, his strong interest in social connections with peers was a strong foundation upon which teachers were able to build new learning. For example, as Matthew continued to struggle with the physical endurance needed to move through all parts of the day, he was more motivated to run, jump, climb and crawl when connecting with his peers. When the teaching team noticed this, they found other ways to capitalize on Matthew's social strengths in the classroom. For example, in addition to arranging the physical environment to support Matthew's focus during dressing, teachers were able to partner him with a preferred peer during these dressing tasks. The peer modeled independent dressing tasks and provided Matthew with the social support as these skills emerged for him as well. Peers

were also an excellent motivator for working on specific speech and communication goals from Matthew's IEP. The speech and language pathologist who worked with Matthew saw that working on articulation of sounds was more successful when peer engagement was included. Matthew had much more investment in making himself understood to his classmates than he might have had working one on one with an adult.

Intensifying Interventions to Address Significant or Persistent Needs

Occasionally children will require more intensive supports to be successful in learning important skills. Intensifying the interventions children receive involves the team in considering questions such as —

- Is the environment arranged so that there is sufficient time and opportunity for the child to practice and receive feedback?
- Is the child spending enough time practicing?
- Is there a different way of intervening that might lead to the same goal?

More intensive interventions are only employed when universal and targeted interventions have not been successful. With Armenian pedagogues continuing to develop the skills to effectively address significant or persistent needs for certain children, examples are again presented from the SGM Lab School to provide ideas about what intensive intervention might someday provide for children in Armenia.

Intensifying Interventions for Omar

Omar's team decided that more intensive interventions were needed to help improve his articulation and social interaction skills. Not only was it taking longer than hoped to see him make the desired progress, but the team was worried that his social relationships with peers

would be negatively impacted as he got older and neared school age. To intensify their interventions, the team decided that a new, more isolated learning environment was needed for Omar's focused practice so that there were minimal auditory distractions and so that the speech therapist could hear and practice specific sounds more easily. To accomplish this, once per week, Omar arrived at school 45 minutes before the other children and worked with a speech and language pathologist on articulation, fluency and a reduction in stuttering.

In addition to this individual time, Omar's team also arranged for the special education teacher to organize a small group of two to four children to join Omar for some focused practice during a play-based activity in a separate area of the classroom or school. When intensifying interventions in this way, selection of the activities may be based on interests or developmental needs of the child. Further, selection of the group or children may also be based on interests or the more advanced developmental skills of other children, allowing them to be good models for the child. In Omar's case, activities usually involved dramatic play with a group of children who were strong communicators as well as patient and supportive. In this small group that was facilitated by an adult, Omar practiced his skills for inviting other children into play, expressing his feelings, and resolving frustration or conflict with peers. To extend this small group practice, Omar received continued modeling and coaching from his teachers and therapists during the naturally occurring social interactions in the classroom. This combination of intensive coaching and natural opportunities to practice the skills was important for his growth overall and helped him form deeper relationships with his peers.

Intensifying Interventions for Matthew

Matthew's team decided that more intensive interventions were needed to address his endurance and participation in the wide array of activities that took place at the Lab School. To be responsive to Matthew's low muscle tone and extensive therapy schedule, his teachers arranged the environment to reduce physical demands, where appropriate, as well as to teach Matthew to appropriately request a break when needed. For example, the school's playground was quite large and located far from the classroom. The teachers found that Matthew enjoyed playing energetically with peers outdoors, but often had little energy left when it was time to make the journey across the playground and back into the school to participate in the next set of activities. The teachers introduced a wagon that he could use to move from the outdoors back inside. The wagon ride allowed Matthew to review his visual schedule to know what was expected when they returned to the room and allowed for continued social engagement to occur as classmates took turns helping pull Matthew's wagon.

Whole-group instruction was an activity in which it was sometimes challenging for Matthew to fully participate. In the classroom, whole-group instruction involved approximately 20 minutes of shared singing, book reading, puppets or facilitated group conversations. On days when Matthew was too fatigued to fully participate, the teachers assisted Matthew in asking to 'take a break,' which allowed him to rest on a sofa in the classroom. Teaching Matthew to request to take a break involved the speech and language pathologist securing a speech-generating device that she taught Matthew to use. She programmed key requests and phrases into it, including "take a break," with pictures that Matthew could select and have the device 'speak' for him. When Matthew requested a break, the teachers let him sit on a couch and look at copies of the books that were used during the whole-group activity. As the year progressed and his endurance and comfort with adult-directed activities increased, Matthew began to participate in group experiences for longer periods and with more frequency. In this instance, teaching Matthew to request time away from the group allowed for his individual needs to be honored rather than forcing participation for which he was not yet ready.

Making Intentional and Effective Transitions from Early Childhood Programs to Primary School Settings

With more and more effort being given to increasing access to high quality early learning programs for young children with developmental delays and disabilities, ensuring that knowledge of what works for a child in one level of education is shared with those in the next level of education as the child grows older is essential to promoting meaningful change. Across the life span, strategies to effectively support transitions for children from home to pre-primary education, from pre-primary to primary, and on to further levels of education is getting more attention in both the United States of America and Armenia. The issue has been analyzed by the experts of Enabling Education Network (EENET) in collaboration with Bridge of Hope (BoH) Armenian NGO. The report elaborates on the barriers and accelerators contributing to a smooth transition of children with disabilities, and it offers some recommendation for transition planning within different levels of the education system and transition to independent living (BoH, 2015). Building on the findings of this research, BoH, in collaboration with MoES and the University of Edinburg, a guide was developed for teachers on the organization of a smooth transition from home to

preschool: http://www.eenet.org.uk/resources/docs/Armenia_transition_research_FINALd.pdf. A similar guide is used for planning transitions of children in the United States: Transition from Preschool Special Education to Kindergarten Checklist — http://ectacenter.org/~pdfs/decrp/TR-3_Transition_to_Kindergarten_2017.pdf. Common across the guides describing effective transitions between education levels and the provision of differentiated educational services within each education level is the need for intentional planning to develop shared under-standings, coordinate supports, and create open communication that remains focused on supporting individual children.

Tips for Teachers

• Foster value for identifying and meeting the needs of children with disabilities that is supported by a team of committed and knowledgeable people.

• Begin by developing a high-quality learning environment that considers how the phys-ical, instructional and social aspects of the program and classroom promote learning for all children.

• Think systematically and creatively about targeted interventions that support the learning of a single child or small group of children within the everyday routines of the classroom.

• Expect that some targeted interventions may not be sufficient and that more intense interventions are needed that reflect a comprehensive understanding of the child's current skills, the goals others have for the child, and the environment in which you would like to see the child achieve those goals.

• Once you find practices and interventions that are meaningfully helping a child partic-ipate and learn in an inclusive early child-hood classroom, partner with the child's

family and the primary school where the child will go next so that they understand the strategies and are able to continue to support the child in meaningful ways.

• Try to see individuality in each child — to identify his or her strong and weak sides, to plan needs-based interventions.

• In work carried out with the child, try to also include the family.

Thoughts for Leaders

• Take time to consider your program's read-iness to offer a high-quality inclusion pro-gram and plan for the training, organization and leadership supports that will be needed to make it successful.

• It is essential to create opportunities for teachers to meet as a team to discuss how things are going, make plans for addressing children's needs and support each other.

• Understand that, especially in early child-hood, families will be at different stages of understanding and acceptance of their child's disability and will need everyone's support to envision new possibilities.

• Create continuous conditions for additional training for your employees in work with children having developmental disorders. If possible, organize supervisions.

• You yourselves should be involved in the process of making individual curricula for children with developmental disorders and carry out supervision to check the quality of the work.

• Try to create conditions for cooperation among professionals within different struc-tures for working with the child. This will enable the acquisition of more information about the child and the proper arrangement of the work carried out.

Review Questions

- What are the key aspects of an inclusive preschool environment that supports the learning of all children?

- How you will organize targeted interventions to support specific needs of children? What will be some of your strategies?

- When and how will you apply intensified interventions?

- What are the challenges of meeting the specific needs of individual children in early learning programs?

- How can you ensure the smooth transition of young children from early childhood development programs to primary school?

Additional Resources

Awareness of and resources for early identification. https://helpmegrownational.org

Information about interventions, supports, and recommended practices for young children. http://www.dec-sped.org/

More information about the Shirley G. Moore Lab School. http://lab-school.umn.edu/about-us/our-approach/

Resources for early childhood program leaders. http://ectacenter.org/sysframe/

Training and support for implementation of inclusive practices with young children. https://iris.peabody.vanderbilt.edu/

Glossary

Early childhood development — A generic term that refers to a child's cognitive, social, emotional and physical development or programs.

Individualized education plan (IEP) — A formal document that describes an individual child's strengths and needs, prioritizes what the child needs to learn, and helps all the adults in a child's life know their role in the plan.

Least restrictive environment — The environment that is believed to be the right fit to meet the child's needs and promote his or her learning.

Meta-cognitive skills — The skills children need to plan their actions, problem solve, and understand how things work.

Preschool education institution — Official term used in Armenia for putting different types of early learning services in one frame. Very often the term *kindergarten* is used instead.

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CHAPTER 14:

Leadership and Administrative Support of Inclusion

Michael Lovett, University of Minnesota
Alvard Poghosyan, UNICEF Armenia
Vergine Yesayan, Principal of Special School, Yerevan

This chapter describes the historical progression towards inclusive education in the U.S. and Armenia, and helps leaders understand and overcome barriers to inclusive education for all children.

Before reading this chapter, ask yourself the following —
- How can administrative institutions be barriers to the change toward inclusive education and inclusion?
- What can we learn from the history of special education that may help us make schools and society more inclusive?
- How does the terminology that we use influence the way we view children with disabilities?
- In what ways can administrative leadership facilitate successful inclusion in schools and school districts?

Introduction

During the opening week of the school year, the principal watched some of the school's youngest learners 'discover' school. In one class, struggling five-year-olds received extra help in the late afternoon. On a card in front of each child, the teacher had neatly printed each child's name and worked with them individually to help them see the connection between the pencil lines on the card and the sound of their name. Consider that while some children begin kindergarten knowing colors and letters and are even able to read, for other children, everything is new.

The principal knelt down by a little girl who looked puzzled by the task. The mystery of the lines was a matter of intense interest. With the pencil held in her tiny hand, she experimented making small, careful lines randomly on the clean paper.

Imitating what he had seen the teacher do, the principal traced letters on her desk with his finger . . . down, then up. The little girl watched, and then did the same on paper with her pencil. Her markings began to form letters, or nearly so, until she finished and looked up. He looked at her masterpiece and read her name aloud. She beamed with a smile that lit the room. She knew she could write her name.

When you read this story, what memories come to mind? Most likely you recall a child you helped in some way — to open a mind and heart to learning. You remember a moment you witnessed a 'miracle of learning.' The premise of this book is that we want all children to experience miracles of learning. The premise of this chapter is that for this to happen, we must individually make a commitment to creating the conditions for these miracles to occur. A big order? Please continue reading.

Chapters in this book focus primarily on 'practices of implementation' that help teachers understand the inclusive classroom and how classroom teachers, specialists, parents and students all have a role in designing and supporting successful inclusive classrooms and inclusive schools.

These practical steps include skills and practices that teachers learn in preparation programs. Among these are assessment, how to work with multidisciplinary teams, how to engage with families of students, understanding the concept and design of an individualized plan for each child, and learning about new technologies that can be used to adapt instructional strategies to the unique needs of each child.

But learning does not stop when we begin our career as teachers; most learning comes with practice. For example, teachers use professional judgment and their own prior learning to adapt instructional strategies for each child. Teachers also know the importance of being

flexible and adaptable to try other strategies to see what will work best for each child.

Within the overall purpose of the book, this chapter focuses on leadership, the 'why' rather than the 'how' of implementation. Each professional must understand the 'why' of inclusive education, whether serving in a national or city ministry of education, as a school principal, or as a teacher or other clinical specialist. All have a part in welcoming all children into classes and making schools safe havens for all children to thrive.

Thus, successful classrooms and successful schools are more than our cumulative understanding of 'how' inclusive classrooms and schools work. Rather, all educators need to understand and live out the compelling reasons for inclusive education. The story at the beginning of this chapter is one of a 'small miracle.' What is your story?

School leaders need to understand the characteristics and stages of an institutional change initiative of this magnitude. Ultimately, inclusive education is successful when all of us work together on behalf of schools, students and one another. Together we learn to anticipate challenges as an expected part of our professional work — and weather these challenges wisely and graciously.

This chapter is intended to help all readers, whatever their position, understand the historical evolution of inclusive education and why these changes are so critical for all students. It will also help readers understand how large-scale institutional change works and critical lessons that will help leaders be more confident in navigating these changes. Our common goal is to redesign our schools and serve more students in a manner that is a gain for all students and for society.

Part 1: The Historical Evolution of Inclusive Education

To understand the importance of inclusive education and why it has taken so long to arrive at today's priorities for inclusive schools, it is helpful to examine how societies and cultures have responded to children with disabilities — or any conditions that create challenges for our preschools and elementary and secondary schools.

This chapter will draw largely on the experiences of Minnesota, a northern midcontinent state that joined the United States in 1858, more than 150 years ago. Minnesota's stages of change will be generalized to similar stages that many regions and countries have experienced. While the time and length of each step varies by country or jurisdiction, it is likely that the stages in this evolution have much in common. To support this statement and in the interest of consistency with other chapters, we will touch upon the historical evolution of inclusive education in the Soviet Union and the Republic of Armenia.

United States, Stage 1: Exclusion of Children with Disabilities

During the mid-nineteenth century, as American public schools became accessible to children in both urban and rural areas, children who had cognitive or physical limitations were routinely excluded from school. Teachers, school administrators and society considered these children unfit for school, unable to function in a school setting. Instead, children with such conditions were confined to home or sent to a facility that would care for them. There was rarely any expectation that the children would be anything but a burden to their families. In some cases, society saw limiting or handicapping conditions as a reflection of the family or social conditions, further distancing most of society from any responsibility for the children.

United States, Stage 2: Training Children with Handicapping Conditions for Employment

Late in the nineteenth century, reform movements began to recognize that among those men and women living in state institutions were many who were able-bodied and would be able to participate in society if provided with needed opportunities. Out of these reforms grew efforts to train children and young adults who had previously been viewed as unfit for school. Today we no longer use the word *train*. Rather, we refer to *educating* all children.

In this era, beginning more than 100 years ago, training generally prepared girls and women in domestic skills such as sewing and cooking, and boys received manual or industrial training (Deno & Hale, 2017).

Since then, much has changed. Vocational rehabilitation programs were developed in Minnesota and elsewhere that provide specialists who assess the skills students possess and provide education and skills training. These agencies then work with employers to design reasonable accommodations so that students can move from school into the workforce and live in the community successfully. In some cases, job coaches are provided so students can gain both on-the-job skills and confidence incrementally.

In some cases, employers receive financial incentives from the state or federal government when they agree to work with a government program that specializes in employing individuals with a handicap or other limitation to job functioning. Most recently, both the federal and state governments have worked with students coming out of high school and with employers willing to provide internships for students with the goal of preparing them for regular jobs at competitive market wages — rather than subsidized jobs.

United States, Stage 3: Recognizing Medical Reasons for Handicapping Conditions and Providing Medical Interventions and Support for Children with Limiting Conditions

Based on pioneering work by Thomas Hopkins Gallaudet in Connecticut, an eastern U.S. state, in Minnesota and elsewhere special schools for deaf and blind children were established. More broadly, the medical and health community began to see the link between disease and social health conditions with specific resulting disabilities or impairments, some of which responded well to treatment, and others to specialized education and interventions.

Most treatment facilities and schools were located well out of the public eye. Even when children with disabilities received an education, it was in a separate facility and likely in an institutional setting so that children were separated from their families.

During the past 100 years, most such schools have been closed, as law changes required children to be educated in the "least restrictive environment." This term is used in U. S. federal law to set the expectation that all children with handicapping conditions or disabilities will have a 'free and appropriate public education' and, to the extent reasonable, be educated with their peers who do not have a disability.

In Minnesota today, only one state school site, the Minnesota State Academies (Minnesota State Academies, n.d.), still exists as a legacy of this earlier time. How attitudes and the law have changed is illustrated by the school's vision statement: "The Minnesota State Academies exist to provide an accessible, standards-based education for students who are blind and/or deaf, including those with additional disabilities, for success in an ever-changing world."

The Academies' mission is also instructive: "Our mission is to educate, create opportuni-

ties and motivate students for an independent future."

Thus, over the period of 150 years, children with disabilities were at first excluded; then educated separately; and now, to the extent possible, included in schools and classes with their peers who do not have disabilities but with a high level of support from teachers and specialists.

United States, Stage 4: Advocating for Humane and Respectful Education for All Children

Society gradually became more aware of children who in an earlier day would have been excluded from schools. Tied in with these changes in attitudes were advances in medical science. An example of an almost universally known story is that of Helen Keller, a child who was both deaf-blind and nonverbal, and the groundbreaking work by her teacher, Anne Sullivan. Helen Keller received a college degree and became an influential writer.

Her story is told in *The Story of My Life* (Keller, 1903) and introduced to later generations with the play, *The Miracle Worker* (Gibson, 1959) and a subsequent film by the same title. Other stories of overcoming handicapping conditions were locally known and combined to fuel a swelling chorus of advocacy for more educational opportunities and respectful treatment of all children. Based on changes in public attitudes and advocacy, major legislation passed at the federal level. Examples familiar to American educators include Section 504 of the Rehabilitation Act of 1973 (Section 504, n.d.) and Title II of the Americans with Disabilities Act of 1990 (Title II, n.d.), which opened the doors for more inclusive education for students, and for changes in the world of employment and all public places that help make transitions from home to school to work more seamless and supportive.

United States, Stage 5: Legal and Legislative Steps to Dramatically Improve Educational Opportunities for All Children

During the second half of the twentieth century, advocacy efforts gradually convinced political leaders that change was imperative, and in 1957 Minnesota passed a law requiring education for handicapped children in Minnesota's public schools — the first commitment of this level in the United States.

During the 1960s at the national level, a time of significant national reform in education, a legislative commission reported that the nation's schools were educating only about one third of children with disabilities, while others were either totally excluded or poorly served (Deno & Hale, 2017).

From the 1960s through the present, through state and national legislation, court cases, and public and private advocacy, schools in the United States have become gradually more inclusive. In addition to the laws already cited from the last quarter of the twentieth century, during the past two decades, federal legislation has significantly increased expectations for schools to be accountable for the academic achievement of all students.

Beginning in 2002, federal law (No Child Left Behind [NCLB], 2002) began requiring schools to report student progress to the public, with segmented reporting so that data on groups of students were made public, including special education students. NCLB in effect set up tensions between the practices of some schools that were satisfied with small increments of progress for students with cognitive or physical impairments, and a public accountability system that publicized the extent to which these same students were proficient — or not proficient — in math and reading.

The 2002 law changes were portions of a reauthorization of major education changes begun in the mid-1960s (Elementary and Secondary Education Act [ESEA], 2016). The law was

again revised and reauthorized in 2016 (Every Student Succeeds Act [ECSA], 2016). Tension remains: For students with special education individual education plans, how much academic progress is enough?

Improvements in inclusive education practice are underway. Some would claim that progress is uneven by state, region, and even among neighboring schools within the same city. Advocacy and efforts to improve practice continue.

United States, Stage 6: Rethinking and Redefining Labels and Descriptions

Listen carefully to children playing, and you may begin to hear their use of nicknames, perhaps in fun; or to reflect imaginary or real characters they are acting out; or based on features or characteristics of each child. If you reflect on your own childhood or on your work with children, you recognize that some of these names can be cruel. You might think, "we said that when I was young, but we would never use that term today!"

Gradually over time, policies, laws and educators have ceased to define a child by a disability; for example, instead of *deaf-dumb* or *deaf-mute*, person-centered terms, such as *children who are deaf or hard of hearing* began to be used. Terms used a century ago to describe children who experience cognitive impairments or severe behavior problems are likewise not in use today. Rather, terms like *intellectual disability*, *mental health issues*, or a reference to a special medical condition would be more common and appropriate. This evolution reflects two important changes: first, respect for the child and family; and second, a desire to describe the medical condition or disease, but without labeling the child. This evolution in the use of terms is ongoing.

United States, Stage 7: Movement Toward Inclusive Schools and More Inclusive Community of Learners

Thus, over time, our schools and society have gradually changed in how we view children with physical or cognitive disabilities or impairments. Today we might hear or read terms like 'differently abled' and cheer our country's Paralympians at the Paralympic games held in conjunction with the winter and summer Olympics.

Changes in terminology were gradual and evolutionary: For example, today children who are deaf or hard of hearing may have been deemed in an earlier day as 'deaf and dumb.' In the 1950s, Minnesota law categorized children with cognitive impairments into the categories of *severe* or *profound mental retardation, trainable mental retardation,* and *educable mental retardation.* The more currently used terms *intellectual* and *cognitive disabilities (mild, moderate, severe, profound)* came later (Deno & Hale, 2017).

We will now turn to the case of the Soviet Union and the Republic of Armenia. The special education system in the Republic of Armenia (RA) was formed during the Soviet period and passed through the stages that were typical for Soviet education. Further in this chapter we will elaborate on special education system development in the Soviet Union and the RA.

Soviet Union, Stage 1: Move from Curative Pedagogy to Defectology

Since its inception, the Soviet Union assumed full responsibility for the education of children with disabilities. The special education system first followed Czarist Russia's traditions of educating children with disabilities, which was based on the curative pedagogy approach. It evolved considerably afterwards under the influence of the theories of Vygotskii and his followers (e.g., Boskis, 1963; Lubovskii,

1956–1958; Meshcheriakov, 1956–1958; Sif, 1956; Vlasova & Pevzner, 1971 as cited in Csapo, 1984) as well as practices of Makarenko. If Vygotskii and Makarenko were the most outstanding contributors to special education before the Second World War (1941–45), Luriia earns the same distinction during the postwar period (Csapo, 1984). There were considerable obstacles and bottlenecks related to the lack of professional expertise and economic hardships during the first years of the Soviet Union. Thus, only in 1935, when the special state decree about "organizing educational activity and regulations in primary, middle and secondary schools" (Malofeev, 1998, p. 181) obliged the Ministries of Education of the Soviet Republics to establish special schools with an appropriate curriculum for defective children in the larger cities in the 1935–36 academic year, the special education system became fully functional in the country (Malofeev, 1998). According to Csapo (1984), "Since then, the trend has been to provide education and vocational training through a network of special schools where conditions can be created to meet specific needs. Preschool, elementary, secondary, and adult education aim to prepare the handicapped person for a positive contribution to society" (p. 12). Those special schools were mainly residential, placed in segregating settings and differentiated by the type of disability of children who attended those schools. The special education was formulated according the science of 'defectology;' included elements of pedagogy, psychology and medicine; and provided instruction based on special curricula.

According to Malofeev (1998), 1950 was another turning point in special education provision when a system for differentiated training of children with blindness or partially sighted children, as well as children with deafness and hearing impairments, was introduced in the Soviet Union. "One of the underlying reasons for such differentiation was the recognition that the milder manifestation of a handicap did not imply that a child needed less assistance; rather, qualitatively different instruction was needed" (p. 183). According to Malofeev, this shift resulted in further categorization of children with disabilities into groups requiring special educational approaches, adoption of new psychophysiological and electrophysiological diagnostic tools, improvement of diagnostic reliability, and facilitation of early recognition of developmental delays and impairments.

By the late 1970s, the structure of special education for children with disabilities remained largely unchanged until the breakdown of the Soviet Union. In the Soviet era, education policies were developed in Moscow, and Armenia, like the other Soviet republics, was engaged mainly in the implementation of such policies.

Soviet Union, Stage 2: Special Schools as Social Safety Nets

After the RA gained independence in 1991, education policy development became a principal aim of the Government of Armenia (GoA). In 1992, the GoA signed the Convention of the Rights of the Child and other international treaties. The laws and normative regulations endorsed in Armenia between 1991–1999, especially the RA Law on Children (1996) and the RA Law on Education (1999), reflected the commitment defined in CRC to acknowledge and realize the rights of children, including the rights of children with disabilities. Despite this policy change between 1991–1999, Armenia for the most part continued the Soviet trends in special education provision. There were eight types of special schools, mainly residential institutions located in the capital city and other big towns. Even more, during the early years of independence, the number of children in special schools increased dramatically as children from socially vulnerable families were enrolled alongside children with disabilities. Due to

the economic hardships of the transition period, parents decided to place their children in residential institutions, where shelter and food was ensured by the state. This was a serious violation of the rights of the child and became a major issue that international organizations led by UNICEF brought to the government's attention. The international community proposed different models of reorganization of special schools and deinstitutionalization of children — first of all, those who came from socially vulnerable families.

Soviet Union, Stage 3: Rethinking Special Education

Since 1999, UNICEF Armenia, in collaboration with Mission East, World Vision and OSI UNICEF, has supported MoES and local NGOs working in the special education field in their endeavors to reform the special education system and make those reforms compliant with international requirements for the protection of child rights and local policy frameworks. A number of educational pilot projects served as the basis for inclusive practices in preschools and secondary schools of Armenia. These projects provided access to general education for children with disabilities and children from vulnerable families to facilitate their early socialization and contribute to public awareness on issues of disability, and they laid an important foundation for later integration of piloting experiences into policy making.

In 2001, 51 public boarding institutions existed in Armenia, 38 of which were intended for children with special educational needs, five for children without parental care and children from vulnerable families, and eight to support education of gifted children. In total, 12,244 children were included in these boarding institutions (Avagyan, 2015).

In 2005, adoption of the Law on Education of Persons with Special Educational Needs, and in 2014, amendments to the General Education Law, legalized the increased mainstreaming of children with disabilities. The deinstitutionalization of children with disabilities and special education needs started in Armenia as it has been described in the previous chapters.

The number of special schools was reduced dramatically *(see Table 1 below)*. Some of those schools were transformed into 'care centers' intended to organize care of children from vulnerable families, and others into regional support centers for mainstream schools that practice inclusion. The reforms are planned to take place until 2025, by complete transition to fully inclusive general educational system.

Table 1. Armenia, Number of Children in Special Schools: MoES Annual Statistical Data Bulletin for 2010–2012
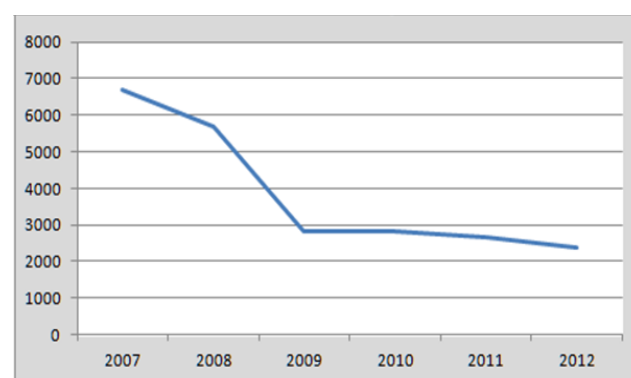
The current policy stresses the key role of the school principal and administration during the reforms. Work efficiency is based on the teamwork principle. The school principal is a member of a multidisciplinary team and a direct participant in the process of organization of inclusive education. The school principal should be the ideological and team leader and not just a manager in order for the process to be efficient.

Why do these changes seem so natural in one school or town, and in another there is resistance and awkwardness? What are the characteristics of a community of scholars and learners where everyone belongs?

This next section offers insights into organizational change. Finally, we offer practices, skills and understandings especially important to successfully lead inclusive education and schools.

Part 2: Understanding Large-Scale Institutional Change

Every year a leader visited faculty meetings at each school for which he was responsible. Before he arrived for the meetings, he talked to the principals in advance about questions or concerns teachers and other staff might have. Then, at the meeting, he would briefly present an update on strategic priorities of the school system and take questions from faculty.

At one elementary school, a first-grade teacher asked, "Do the administrators who work for you ever talk to one another?" Her question came out more directly than she had intended; she blushed and continued, "I mean, we understand the importance of the strategic priorities you have described, and we genuinely appreciate the leaders who help us with professional development. But each of them tries to help us with the priority he or she knows most about, and as teachers, it is really difficult to coordinate and put all the different ideas into practice. Could they talk with one another and coordinate their presentations?"

Could this question have come from a teacher in your school or schools?

Teachers almost everywhere describe 'initiative fatigue.' Teachers explain how so many new initiatives and priorities come 'from above' and how difficult it is to complete their own priority — work with children. And sometimes, they add, new initiatives seem to conflict with previous directions and expectations. Such challenges are common to any initiative; for a large-scale change like the transition to inclusion schools and classrooms, the challenge is especially significant.

The following principles of change management are based on the experiences of the author, whose school administrative career has spanned more than four decades in Minnesota. This section will focus on six general principles of effective change leadership, and the third and final section will summarize three lessons for inclusion leadership.

Principle 1: Leaders Must Clearly Communicate the Change and the Compelling Reason for the Change

Remember that leaders may view a change as 'evolutionary,' to be phased in over a period of months or years. However, at the school or classroom level, these same changes can feel 'revolutionary,' upsetting the school and classroom culture. It is important for leaders to regularly explain the compelling 'why' for the change.

Principle 2: Change Will Be More Effective and Successful If Employees Understand How the Proposed Change Is Consistent with Their Own Values

Consider that employees are motivated by both *intrinsic* and *extrinsic* factors. To inform teachers that they must change in accord with a new law or policy will likely gain general compliance. But this is an example of extrinsic motivation: "I will do what I am told to do because I don't want to get into trouble."

In contrast, if teachers learn how the proposed changes fit into their own values and are consistent with the reasons they became a teacher, leaders are tapping into intrinsic motivation: "I want to be part of this change and am committed to making the transition a smooth one for my students."

Principle 3: Honor Work Staff Are Already Doing and Give Them an Opportunity to Help Design Strategies to Implement Changes

In other words, be consistent in communicating the purpose of the changes and flexible in the choice of strategies to implement the goals.

Leaders can articulate purpose and goals and design an overall structure to carry out a change (for example, levels of responsibilities and metrics for evaluation). Next, they can give principals and teachers an opportunity to develop implementation strategies. This two-step process gives ownership and generally results in changes that are more likely to be sustained.

Principle 4: Provide Resources and Support to Staff to Help Implement the Change

One challenge of allocating resources is that until strategies are designed, it is difficult to know where and how to allocate resources. One important point: If staff view changes as an 'add-on' that can only be accomplished with additional resources, the change process is likely to be difficult and may stall.

In contrast, if staff are engaged in actively helping to design new ways of teaching and learning to replace old practices, system resources may be more easily reallocated from old practices and programs to new and more innovative strategies. In other words, teachers will be committed enough to the new strategies that they will be advocates for reallocating resources.

Principle 5. Begin the Change with Those Who Are Most Ready

Major changes are generally made up of many small incremental changes, well aligned and with a compelling long-range goal. Look for places where initial success is more likely.

Which teachers, grade levels or schools would be good places to begin?

Remember that your 'pioneers'– as eager as they are to participate — will face additional pressure and scrutiny from their peers, as well as the uncertainty that comes when any of us are part of an innovation.

Principle 6. Recognize and Affirm Progress

It is important that leaders recognize staff for their part in a change effort. Just as important, learn how those who are participating in any change prefer to be affirmed.

For one, it might be words of praise. For another, the most important form of affirmation is a visit to a classroom to see a teacher in action, or a team working together, or a visit to a school where the principal has results to show. For others, more public recognition may be important.

Finally, keep to the message — why the change is important and compelling. And also remember, as the question from the first-grade teacher reminded us in the beginning of this section, make sure that those under your supervision are 'talking with one another' to understand and coordinate efforts.

Part 3: Leadership Insights and Skills

For an initiative on inclusion to be successful in one school, city, region, province or country, it must become more than a matter of the 'head' — that is, more than changes in law and policy and administrative directives. Rather, it must become a matter of the 'heart' as well. That is, the experience of inclusion will bring out remarkable stories of compassion, of children and adults overcoming obstacles, and remarkable successes, all of which reach the heart as well as the head.

This section draws important lessons that go beyond basic compliance and are reflections of staff and leader commitment to inclusion.

Story 1: "We Are on the Same Team!"

As a primary school student, this cheerful boy was everyone's friend. His optimistic, outgoing personality made it difficult to ignore him. He was not afraid of anything and enjoyed playing games with his classmates. The other children liked him, even though he could be annoying, and they understood why it was important that he felt welcome.

Middle school was difficult for this boy. His friends from elementary school often seemed too busy to include him. Their sports teams became competitive, and he was not tall enough or quick enough to participate. Unlike elementary school, where the children were all in class together, in middle school he was for the most part in classes with children who, like him, could not succeed at the pace of the more rigorous math, science and literature classes. A highlight of his day was choir, where everyone was together.

But gradually, another activity became an option. The boy had participated in Special Olympics for years, and a few friends would come to watch him. But then the school and community began something they called 'unified teams.' Rather than just teams of children with physical or cognitive disabilities, these teams were combined to include children with — and without — limiting disabilities. At first, it was just older brothers and sisters who joined, wanting this 'unified' experience for their own siblings. But then others joined, including student leaders.

Now, as a high school student, the boy wears his radiant simile everywhere — because wherever he goes, he sees his teammates. And they see him as their friend and teammate — not the 'boy with Down syndrome.'

Story 2: "This Is the Job I Have Always Dreamed About!"

For as long as her elementary classmates could remember, she hobbled around on crutches. Then she would be gone for a while at the hospital, and their teacher would organize classmates to write notes of encouragement, many adorned with trees and birds and flowers, and some with trucks and scary monsters. She liked them all. They remembered her.

By middle school, she was more frequently in a wheelchair, especially after surgeries and long hospital stays. As middle school became more difficult — she wanted to keep up with rigorous classes, but her long absences made science labs and interacting with other children more difficult. Nevertheless, she persevered, and did reasonably well academically. But not yet confident about going to college, she wanted first to gain more independence and have a work experience. She wanted real work — something that would challenge her and that she could continue while beginning college part time.

Through an innovative partnership between city businesses, government and the schools, she was among those recent high school graduates invited to tour a pilot program at the region's specialist children's hospital. Paid internships were available for a full year, with job coaching and mentorships — and would lead to market-competitive wages.

At the end of the tour, she beamed. "This is where I would like to start my career," she told her teacher and parents. "After all, I know the hospital well — I have been coming here for surgery for as long as I can remember!"

As you reflect on these stories and those of your own of children who have succeeded as a result of inclusion, consider these three lessons for leaders —

Lesson 1: Model What You Want Others to Follow

Change is difficult in an educational setting. Most educators — whether presently in teaching or leadership roles — began as teachers or in another specialist role working with children. They work hard and sacrifice a great deal for their students. They come to believe passionately in what they are doing. When a new initiative or an approach — like inclusion — comes along, many educators will worry about how the changes can occur without somehow reducing their services and support to the children they have been serving.

Thus, as a leader, it is important for you to 'model' the changes you want to see implemented. This may mean that you join principals or teachers in visits to model inclusive schools or classrooms.

And it may mean that others must see you genuinely helping children, parents and teachers work through challenging circumstances. Others will judge you by what they see — and whether what they see is consistent with what you say.

Lesson 2: Be Present at Successes and Challenges

Given the United States experience with inclusion over the past forty years, one lesson learned is that leaders must anticipate unintended consequences when changes are made. For example, a change that makes sense in one school may not work well in another. If you are a principal or other administrator, listen to teachers and other specialists. Hear their ideas for improving practice. Be present in classrooms. If you have responsibility over many schools, learn what experiences your principals have with changes.

Celebrate successes. But 'go to the hurt' — that is, when inclusion is not working well, visit schools and classrooms with an open mind.

Assume good intentions. Keep to the goals of inclusion, but be flexible in strategies to achieve the goals.

Lesson 3: Your Commitment Makes a Difference

This chapter began with a story. Recall —

Imitating what he had seen the teacher do, the principal traced letters on her desk with his finger . . . down, then up. The little girl watched, and then did the same on paper with her pencil. Her markings began to form letters, or nearly so, until she finished and looked up. He looked at her masterpiece and read her name aloud. She beamed with a smile that lit the room. She knew she could write her name.

Each of us can form an image in our mind of a child learning to write his or her name. As teachers and leaders, we have personally experienced the exhilaration and joy that come when we see a child succeed.

There is more to this child's story. In the following months, the principal learned more about her. He could see that she had some physical challenges that she needed to overcome. But he also learned about her earlier life and impediments she had already overcome. As with all children, some impediments, challenges or limitations are visible and others not.

The principal watched year by year. He saw the concern of her parents, the commitment of her teachers and the anxiety the child felt when it was time to go on to middle school. He told this story to the middle school teachers the week before the child was scheduled to begin middle school. Of course, none knew who the child was. But all of them knew they could be the one who had the power to make her first day one of joy and encouragement.

In summary, the premise of this book is that we want *all* children to experience miracles of learning. The premise of this chapter is that for this to happen, we individually must make a commitment to creating the conditions for

these miracles to occur. We hope that in some small way, these words and stories give you insights and confidence to continue to grow to be such a leader.

Tips for Teachers

- Keep in mind the long evolution of inclusion and inclusive education and the work that has been done by your colleagues who preceded you.

- Use your position as an educator not only to teach, but to also be an advocate for your students' rights and futures in an inclusive society.

- Get to know your leaders and their approach to change so that you can contribute to the movement toward inclusion on a daily basis.

Thoughts for Leaders

- Clearly communicate the change and the reason for the change to your staff.

- Align the changes you are proposing with the opinions and values of your staff.

- Acknowledge the work staff are already doing and give them an opportunity to help design strategies to implement changes.

- Provide resources and support to staff to help implement the change.

- Begin the change with those who are most ready.

- Recognize and affirm progress.

- Model what you want other to follow.

- Be present at successes and challenges.

- Understand that your commitment makes a difference.

Reflection Questions

- What stages has the field of inclusive education gone through in the United States? Do these stages resemble those in Armenia?

- How would you compare the development of disability-related terminology in the United States and in Armenia?

- What is the role of school leadership in successful implementation of inclusive education?

Additional Resources

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Glossary

Vocational rehabilitation programs — Federally and state-funded programs providing services to assist individuals with disabilities to enter or return to employment in integrated settings.

Reasonable accommodations — Adjustments or modifications that enable people with disabilities to perform the essential functions of a job efficiently and productively.

Initiative fatigue — When staff are reluctant to implement any new initiatives or programs because there have been too many proposed for implementation in the recent past without their input.

Evolutionary change — Organizational change that is done gradually and collaboratively.

Revolutionary change — Organizational change that is done abruptly by top leadership.

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CHAPTER 15:

Conclusion: Inclusive Education or a Sum Bigger than its Parts

Paula Frederica Hunt, Disability, Education & Development, Lda., Portugal

Inclusive education is not a place or a destination. There is no prescription. The intended end result of inclusive education — social inclusion — is much larger than the sum of the essential parts that create it.

Inclusive education is not a place. Inclusive education is not a destination.

Likewise, there is no prescription for inclusive education because it cannot be reduced to the sum of a few pieces. Rather, the intended end result of inclusive education — social inclusion — is much larger than the sum of its parts.

Inclusive education encompasses a philosophical stance and a set of practices, both aimed at ensuring the "progressive realization" of the right of all children to full participation in education (Hunt, 2009). And while this book details many of the moving parts that enact inclusive education, how these combine to transform the Armenian education system will likely be exclusive to Armenia, and require a constant process of trial-and-error.

Inclusive Education in Armenia and Across the Globe

Armenia has long traveled the path towards inclusive education. However, like many other countries in the region, inclusive education in Armenia has been conceptualized as a parallel system of education. Despite efforts to ensure legislation is responsive to children with disabilities, an evaluation of the general education system in 2009 found that many governing bodies still maintain and endorse special schools. When inclusive education has been introduced as an alternative to special and mainstream education systems, the relevance of these programs is often compromised. Inclusive schools are not widely available, and scaling plans do not encompass all marzes (regions), which will likely contribute to the perception that inclusive schools are only for a certain segment of the school population. Even where inclusive schools are available, they are not accessible to all students, because of inadequate infrastructure, resources, or services (Hunt, 2009). That 2009 evaluation guided much of the work of UNICEF and the Government of Armenia on education for the next five

years and, together with NGOs and Disabled Persons Organizations, lead to the Ministry of Education introducing new legislation.

An exercise to evaluate progress as compared to the 2009 recommendations completed in 2016 found that, "great progress has been accomplished, particularly in the legislative domain, since 2009. However, it should be noted that the Amendment of the Law on Mainstream Education of 2014 still falls short of what a truly inclusive education legislation should look like (UNICEF, 2014). The Law currently allows a parallel system of education (regular and special), giving preferential treatment to students who are gifted and talented, and confining the right to provide education in a second language to a few schools throughout the country. Further, the Law emphasizes the process of identification of children with special needs and, within this process, continues to privilege pedagogues over regular education teachers, effectively perpetuating the dual system" (Hunt, 2016). As indicated in the report, the education system not only maintains traditions that give preference to children who are considered to have above-average abilities, but it also limits the ability of schools to provide early education to minority children in their mother tongue to a small number of schools in some areas of the country. In addition, at the time of the report, dialogue about inclusive education and school reform was confined to special education and professionals engaged in the education of children with disabilities. Regular education teachers were left out of much of the dialogue and often made to feel unwelcome in the few instances where they demonstrated willingness to engage in discussions.

As evidenced above, progress towards inclusive education in Armenia has been slow, but steady. Critics of inclusive education in Armenia and elsewhere often ask for country examples and evidence that inclusive education *works*. However, lessons learned and the reasons why

"progressive realization" is further along in some places than others is seldom examined. Conversely, some of the countries where inclusive education *works* are those that monitor, examine, and modify their practices to respond to their own issues — or what *works* for them: Finland's standards are related to school success for the bottom performing 1% of their students; New Zealand's standards are related to tertiary enrollment and graduation of their indigenous populations; Portugal's standards are related to the latest United Nations' evaluations and upholding democratic principles.

What about countries where inclusive education *does not work?* Or, more accurately, where there has been slower progress towards inclusive education? In Germany, the education system starts tracking children as early as primary school and segregation is endemic. In South Africa, the education system mirrors social tendencies and is unable to sustain progress for long periods of time. In the USA, implementation of education depends heavily on State legislation, creating a patchwork of practices across the country, some more inclusive than others.

However, all these countries — where it *works*, and where it *does not work* — have in common teacher practice based on the principles and pedagogies presented in this book in, at least, some schools and to some extent. The set of variables that seem critical to inclusive education is unlikely to be the tipping point to developing inclusive education because in all six countries, teacher education is of high quality and a government priority. In all six countries, policies related to children with disabilities require parental involvement, early identification and intervention, individualized education plans, transition to adult life, and so on. In all six countries, Universal Design for Learning (UDL) is more or less established as the basis for accessibility, and assistive technol-

ogy is present — and usually accessible — to most children with disabilities who need it.

The Role of Teacher Education in Promoting an Inclusive Education System

All six countries mentioned above are at very different places in their trajectory towards inclusive education because the sum of the parts of each of their specific systems is not yet bigger than the parts themselves. But this difference in trajectory also illustrates the premise implicit in this publication: the combination of the principles and pedagogies in this book do not amount to inclusive education in themselves. The principles and pedagogies in this book and accompanying materials (webinars and learning modules) must be enacted within a transformative framework that includes many other aspects of the education system and go beyond teacher preparation (and beyond the system) in order to advance inclusive education. Armenian teachers must find the most suitable combinations of approaches that allow these principles and pedagogies to work together and in each of their contexts, and work deliberately to ensure their students participate fully in inclusive education settings.

The absence of these principles and pedagogies will likely hinder inclusive education because — individually and collectively — they are needed to tailor instruction and uphold the rights of children and youth. But, again, their effectiveness may be limited. Most of the principles and pedagogies presented in this book were developed and are still (rightfully) used by special education professionals in segregated special/regular education systems, particularly outside of the USA. This restricted use of individualized and responsive principles and pedagogies has created a systemic barrier to inclusion in many countries. To promote and develop an inclusive education system, these

principles and pedagogies need to be taught to ALL teachers, and promoted as principles and pedagogies for ALL students. If *good teaching* is not the purview of a small cadre of professionals, then g*ood teaching* — inclusive education — has to be the norm for ALL teachers and ALL teacher education: a shared vision and a shared responsibility.

In 2012, the European Agency of Special Needs and Inclusive Education published the *Teacher Education for Inclusion Profile (TE4I)*, a comprehensive study focused on providing concrete and explicit guidance to countries aiming to design and implement initial teacher education programs. The study answers the question "*how all teachers are prepared via their initial education to be 'inclusive'*" (p. 8), and its findings are relevant and applicable across cultural and geographic borders.

According to the TE4I Profile, teacher education programs that focus on inclusive education should be based on four core values, each with a set of corresponding competencies —

1. Valuing learner diversity
   - Learner differences are considered a resource and an asset to education;
   - Conceptions of inclusive education;
   - The teacher's view of learner differences.
2. Supporting all learners
   - Teachers have high expectations for all learners' achievements;
   - Promoting the academic, practical, social, and emotional learning of all learners;
   - Effective teaching approaches in heterogeneous classes.
3. Working with others
   - Collaboration and teamwork are essential approaches for all teachers;
   - Working with parents and families;
   - Working with a range of other educational professionals.

4. Continuing personal and professional development — teaching is a learning activity and teachers take responsibility for their own lifelong learning
   - Teachers as reflective practitioners;
   - Initial teacher education as a foundation for ongoing professional learning and development.

Thus, it is easy to see how developing *inclusive teachers* relates to this book.

How to Prepare Inclusive Teachers in Armenia

ALL *inclusive teachers* must understand the main principles of Universal Design for Learning (UDL) if they intend to plan and teach ALL students in their classrooms. This requires a strong pedagogical foundation and a good understanding of what a teacher must do to ensure child-centered learning. UDL and child-centered learning acknowledge that learning is a lifelong process that begins at birth. However, since 85% of the human brain develops in the first five years of life, it is important that ALL teachers also understand the importance of Early Childhood Development for ALL students, and grasp the advantages/disadvantages some children have already been exposed to upon entering school.

ALL *inclusive teachers* must understand the role of families in education and promote their involvement in pro-active and constructive ways. Families, and family dynamics, influence the daily lives of children regardless of their individual characteristics, and families are intrinsically connected to the day-to-day relationships between schools and students. Thus, decision-making that ignores families' points of view is doomed to fail. Multi-disciplinary teams, assessment, and multi-tiers of support must include families, to ensure a holistic view of the child and that interventions continue at home.

ALL *inclusive teachers* must understand their role in pro-actively individualizing instruction and being accountable for student support. Individualized Education Plans (IEPs) are not developed *for* students, but rather developed *with* students, with the aim of ensuring all actions in the school environment lead students to fully participating in their education. Instructional strategies, access to environment and information, and assessment are all intrinsically connected and must be responsive to each student. However, they are not exclusive to students with learning difficulties, but rather open to all students, in response to each student's learning style.

Likewise, ALL students need (in varying degrees of intensity) social and psychological support to navigate emotional and physical growth, opportunities to practice self-determination, to learn their rights and responsibilities as developing citizens, and support in finding educational/employment outcomes that align with their aspirations.

In Armenia and elsewhere, the process towards Inclusive Education must demystify special education, deconstructing what has been seen as "special" teaching, and normalizing a "specialty" or "expertise" that only some teachers have and only some students (can) receive. Special education is a necessary support system for families, schools and teachers, and will likely remain in systems where it already exists. But the role of special education professionals will change over time, and this change may be a barrier or an opportunity for the further development of Inclusive Education.

In Armenia, many special education professionals are already drivers of change and promoters of Inclusive Education, but more needs to be done to ensure knowledges and skills thus far seen as their own *specialty* — such as the principles and pedagogies in this book — are shared widely and enacted by as wide a group of professionals as possible. While it is important to change the rhetoric around special/general education to ensure new ways of talking about transformative practice, merely changing the language without changing the practice undermines education reform, and only serves to mask and perpetuate deep inequity. In Armenia, as elsewhere in the region, "inclusive" language (e.g., "inclusive school", "inclusive child", "funding for an inclusive child") is being used to depict circumstances that have little to do with Inclusive Education. Therefore, all those who read and use this book and the associated materials must question not only the language used daily in schools but also the practices behind the language and engage in productive dialogue to incentivize the "progressive realization" of Inclusive Education in Armenia.

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APPENDIX

Author Bios in Alphabetical Order

United States of America

Brian H. Abery, Ph.D. is the Co-Director of the Global Resource Center on Inclusive Education and the Research and Training Center on HCBS Outcome Measurement at the University of Minnesota's Institute on Community Integration. His research focuses on response to intervention, formative assessment, self-determination, and social inclusion. Dr. Abery's international work centers on the implementation on inclusive education practices in post-Soviet and Southeast Asian countries.

Erik W. Carter, PhD, is Cornelius Vanderbilt Professor of Special Education at Vanderbilt University in Nashville, Tennessee. His research and writing focus on promoting inclusion and valued roles in school, work, community, and congregational settings for children and adults with intellectual disability, autism, and multiple disabilities.

Elizabeth Criswell, MEd, is an Early Childhood Curriculum Coordinator and an Instructor at the Institute of Child Development at the University of Minnesota. She also serves as special education liaison in the Shirley G. Moore Lab School. She teaches courses in social and emotional development, infant development, and theories and philosophies of education.

Marietta N. Janecky, MEd, BCBA is a Board Certified Behavior Analyst working with children with autism and other developmental disabilities. She oversees the daily treatment of over 30 children with autism in a day treatment program in Minnesota and provides consultation to families, schools, and centers world-wide. Ms. Janecky also supervises professionals in their pursuit of board certification as behavior analysts.

LeAnne Johnson, PhD, is an Associate Professor for Special Education Programs in the Department of Educational Psychology at the University of Minnesota. She is the Director of the Early Childhood Special Education Teacher Licensure and Master's programs. Dr. Johnson's research focuses on developing innovative ways to enhance the skill sets and mindsets needed by practitioners to effectively address the social, emotional, and behavioral needs of young children.

Christopher Johnstone, PhD, is an Assistant Professor of Comparative and International Development Education at the University of Minnesota where he coordinates the Leadership in International and Intercultural Education doctoral program. Dr. Johnstone has published widely on topics of inclusive education and international higher education. His current projects include a global evaluation of UNICEF inclusive education policy, a book project on inclusive development, and a research grant focused on inclusive development in Bhutan.

Michael J. Lovett, PhD, was superintendent of schools for the White Bear Lake Area Schools in Minnesota from 2008-2017. Prior to becoming superintendent he was an administrator at the school, district, and state department levels. He is currently an adjunct instructor at both the University of Minnesota and the University of St. Thomas in organizational leadership, and serves on several nonprofit boards.

Kristen L. McMaster, PhD, is a Professor of Special Education in the Department of Educational Psychology, University of Minnesota. Her research interests include creating conditions for successful response to intervention of students at risk for and with disabilities. Her research focuses on promoting teachers' use of data-based decision making and

evidence-based instruction, and developing intensive, individualized interventions for students for whom generally effective instruction is not sufficient.

Susan O'Connor, PhD, is an Associate Professor of Education and coordinator of the special education program at Augsburg University. Her background is in disability studies and inclusive education, especially for students labeled with significant disabilities. Her research interests include: supporting families, systems change related to including of the voice of people with disabilities in the politics of change, and issues of disability and disproportionality.

Renáta Tichá, PhD, is a Research Director and a Co-Director of the Global Resource Center on Inclusive Education at the University of Minnesota's Institute on Community Integration. She has extensive experience in the development, implementation and evaluation of assessments and interventions for children and adults with different types of disabilities. Dr. Tichá's international work has focused on the challenges and opportunities of people with disabilities in post-Soviet and Southeast Asian countries.

Sheila Williams Ridge, MA, is the Director of the Shirley G. Moore Laboratory School at the University of Minnesota. She has extensive experience in inclusive early childhood education. Ms. Williams Ridge is passionate about encouraging nature-based play and the lasting developmental benefits of a relationship between all children and nature.

The Republic of Armenia

Armenuhi Avagyan, PhD, is a speech therapist and a faculty member at Armenian State Pedagogical University. Dr. Avagyan is the Founder and Director of the Education and Research Foundation that has been carrying out research focusing on inclusive education. Currently, she is a Fulbright scholar at Appalachian State University conducting post-doctoral research on Peer-Mediated Augmentative and Alternative Communication Intervention for Non/Minimally Verbal Preschoolers.

Tereza Azatyan, PhD, is the Chair and Associate Professor of Special Pedagogy and Psychology at Armenian State Pedagogical University. She is a researcher at the university's Reserach Centre on Inclusive Community and Disability. She teaches courses on special pedagogy, psycho-pedagogical support to children with multiple disorders, and inclusive education. Her academic interests include spatial orientation of children with learning disabilities as well as special and inclusive education.

Marianna Harutyunyan, PhD, is the Head of International Cooperation Unit and Associate Professor in the Faculty of Special and Inclusive Education at Armenian State Pedagogical University. She is also the Director and research of the university's Research Centre on Inclusive Community and Disability. She is a doctoral candidate and researcher at the Faculty of Education at the University of Oulu in Finland. Her research focuses on various aspects of inclusive education comparative education and special education, inclusion, and rehabilitation.

Lilit Karapetyan, MA, is a Psychologist and a Lecturer at the Department of Special Pedagogy and Psychology at Armenian State Pedagogical University. She is an alumna of Educational Leadership Program at Perkins

International and the Americans with Disability Act 25 Anniversary Inclusive Education Fellowship Program. Her professional interests include supports and strategies of children with multiple disabilities, behavioral problems.

Siranush Karapetyan, PhD, is the Dean of the Faculty of Special and Inclusive education at Armenian State Pedagogical University. She is also a speech therapist at Yerevan State Medical University. She teaches subjects including: Speech disorders, Special Psychology, Examination and diagnosis of speech disorders, Speech therapy in educational and medical institutions. Her specific field of interest is special pedagogy and psycholinguistics.

Marine Marutyan, PhD, is an Associate Professor at the Faculty of Special Pedagogy and Psychology at Armenian State Pedagogical University. She is a speech therapist in a Rehabilitation Center of N 9 Polyclinic of Yerevan and a teacher trainer. Her research interests are: theory and practice of inclusive and special education and education and psycho-pedagogical support of children with visual impairments.

Mher Melik-Bakhshyan, MA, is a Vice-Chancellor and the Head of Department of Academic-Methodological Affairs at Armenian State Pedagogical University. Previously he led the division of Higher Education Policy Development and Management in the Ministry of Education and Science in Armenia. For his work, he has been awarded the Diploma of the Ministry of Education and Science, "Glorious Warrior" medal of Patriotic Union of the Republic of Armenia, medal of Kiev Dragamanov National Pedagogical University, as well as the medal of Armenian Philosophical Academy "Davit the Invincible".

Zhanna Paylozya, PhD, is an Associate Professor at the Faculty of Speech and Rehabilitative Therapy at Armenian State Pedagogical University and a speech/language pathologist. Dr. Paylozyan supervises speech therapy services of "Shirakatsy Lyceum" international Scientific-Educational Complex. Dr. Paylozyan's areas of expertise include learning disabilities and aphasia.

Alvard Poghosyan, MA, works in UNICEF Armenia leading the Education Program on addressing multi-faceted deprivation of children through cross-sectoral policies and interventions in early childhood development and education. Previously Ms. Poghosyan led an Education Program in UNICEF Kyrgyzstan. Her background is in educational leadership and early childhood education.

Araksia Svajyan, PhD, is an Associate Professor at the Faculty of Special and Inclusive education at Armenian State Pedagogical University. She is also the Director of Arev Child Development Foundation. Dr. Svajyan works as an expert and trainer in international and local organizations (e.g. World Vision Armenia) in different programs (e.g., Early Child Development). She has published numerous scientific and methodological articles on the difficulties and achievements of inclusive education.

Vergine Yesayan, MA, is a Principal of a Special School for children with physical disabilities in Yerevan. Previously, she worked in the Medical-Psychological-Pedagogical Assessment Center and as a lecturer at the Faculty of Special Pedagogy and Psychology of Armenian State Pedagogical University in inclusive education. Ms. Yesayan has extensive experience in school and preschool teacher training on assessments and ILP design and implementation.

Portugal

Paula F. Hunt, PhD, is the owner and principal researcher of Disability, Education and Development (DED), Lda. She has been an expert consultant on inclusive education with various international organizations (UNICEF, IDA, II, P4EC) focusing on capacity development related to the inclusion of children with disabilities in various countries. She has supported governments and civil societies in policy development and data collection. Dr. Hunt is an experienced teacher and a lecturer on students with exceptional learning needs.

Collaborating Institutions

University of Minnesota

The University of Minnesota is a land-grant institution focused on education, scholarly and creative activities, research, and service. Enrolling approximately 55,000 students, the Twin Cities campus is one of the largest universities in the U.S. and ranks among the top ten in receipt of federal grants for research and development in the country. Recent national surveys rank many of the University's programs among the country's top ten, and its Graduate School was ranked among the nine best American public universities. There is a strong international presence at the University which has numerous international alumni including Okyu Kwon, deputy prime minister and minister of finance of the Republic of Korea and Luis Carranza Ugarte, Peru's minister of finance. The University regularly hosts international visitors, coordinates international research presentations through its International Connections program, and has a variety of doctoral programs that target professionals in international settings. Faculty and staff are engaged in international grants with USAID, UNICEF, CARE, USDOS, and a variety of private foundations.

Website: https://twin-cities.umn.edu

Institute on Community Integration

The Institute on Community Integration (ICI) is a University Center for Excellence in Disabilities (UCED). Along with its allied centers, including the Global Resource Center on Inclusive Education (GRC), Research and Training Centers on Community Living and Home and Community-Based Services Outcome Measurement, and the National Center on Educational Outcomes –

ICI is part of a national federally-supported network of University Centers on Disabilities and other federally funded disability research and training efforts at universities across the United States. The Institute's mission is to improve the quality of life and community inclusion of persons with disabilities as well as the professional services and social supports available to individuals with disabilities and their families. The Institute is currently implementing over thirty research, training, and technical assistance projects funded by the federal and state government, and private foundations. The project topics include self-determination, social inclusion, and academic success of students with disabilities, facilitating their transition into adulthood; enabling access to high-quality services and supports, and promoting living within inclusive communities. ICI not only serves, but employs individuals from numerous ethnic and disability backgrounds. ICI staff have collaborated on projects not only locally and nationally, but also across the globe, including in Russia, the Czech Republic, India, Costa Rica, Bhutan, Ukraine, Armenia, Kazakhstan, Zambia, Liberia, Kenya, Micronesia, and New Zealand.

> **Website: https://ici.umn.edu**

Khachatur Abovyan Armenian State Pedagogical University

Khachatur Abovyan Armenian State Pedagogical University was founded in 1922 and in 1948 it was named after great Armenian Enlightener and Educator Khachatur Abovyan. The university prepares students in over 60 specializations in the field of education at BA and MA levels and is the only state pedagogical university in Armenia. All university activities are regulated by legislative documents, rector's orders, and by the Board. The Board is formed from representatives of the faculty, students, the Armenian Government, and Ministry of Edu-

cation and Science. The university is the only institution of higher education in Armenia that has a Faculty of Special and Inclusive Education, founded 2011. The mission of the Faculty of Special and Inclusive Education is the preparation of specialists for working with persons with special education needs and ensuring accessible environment and supports for students and employees with disabilities. The Faculty includes the following specializations: Speech Therapy, Occupational Therapy, Art Therapy, Special Psychology, Special Pedagogy, etc.

Research Center on Inclusive Community and Disability Issues of Armenian State Pedagogical University was founded as a result of a cooperation between Armenian State Pedagogical University and the University of Minnesota. The Center's aim is to invest in inclusive society and disability issues in Armenia and in the region. Established at the end of 2018, the Center has a mission to generate new knowledge and promote its effective use to increase participation of people with disabilities in community life by improving their skills and opportunities. A related goal of the Center is to expand society's awareness and capacity to provide full accessibility to education, community living and employment for people with disabilities in Armenia. Starting from the date of its establishment, the Center is cooperating with different organizations and conducting two research projects on inclusive education financed by Austrian Caritas Organization in four different regions in Armenia (Tavush, Lori, Syunik, Shirak).

> **Website: https://aspu.am/en/**

UNICEF and UNICEF in Armenia

Active in more than 190 countries and territories, UNICEF is the world's leading advocate for children. We promote the rights of every child, everywhere, in everything we do. By 'every child,' UNICEF means infants and adolescents, boys and girls alike. The UNICEF mandate covers all children below the age of 18, as per the Convention on the Rights of the Child (CRC).

UNICEF has worked in Armenia since 1994. As a reliable partner and a strong, independent voice for children's rights, UNICEF promotes the inclusion of the most underserved children in national policies, convening partners around a child rights-based agenda, and providing high-level international technical expertise.

In the past two decades, UNICEF has supported Armenia to cut under-5 child mortality by half, protect children from preventable diseases through 90% immunization, eliminate measles, mother to child HIV transmission, and achieve polio-free status. We have also worked to expand access to preschool education and advance inclusive education for children with and without disabilities. With the support of UNICEF, Armenia has achieved a 75 percent decrease in the number of children in residential care and correctional facilities.

UNICEF works to ensure that children, aged 0-6, have access to quality and inclusive health care and nutrition services, that children with disabilities are included in the society and can exercise their right to quality education and rehabilitation, and that the judicial system safeguards the best interests of the child. This agenda is built to contribute to the Government of Armenia national strategies, as well as a range of sectorial programs on human rights, child rights protection, education, health, nutrition, and disaster risk reduction.

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