Standardized Achievement Tests and Inclusive Education: A Match Not Made in Heaven

Joni Turville

School Learning Communities: Engaging All Stakeholders

Michelle M Dow

Supporting Students with Anxiety in Schools

Maisha M Syeda and Jac J W Andrews

The Alberta Teachers' Association

CIE COUNCIL FOR Inclusive Education

THE
Inclusive
Educator
JOURNAL

The Journal of
the Council for Inclusive
Education of the Alberta
Teachers' Association

CIE COUNCIL FOR
Inclusive
Education

The Inclusive Educator Journal

Volume 1, Number 1, October 2015

Contents

FROM THE EDITORS

Kelly Huck and Nancy Grigg

"May you live in interesting times!"

Although there is no evidence that this is an actual Chinese proverb, the phrase nevertheless rings true for teachers in Alberta. Living in these interesting times can be viewed as either a blessing or a curse—but perhaps the move toward inclusive education should be viewed as a combination of the two. While we enthusiastically support the philosophy of inclusion, the move to that model challenges us in multiple and complex ways. Almost all aspects of education will be altered, including policy development, curriculum and assessment, instructional strategies, learning resources, technology—the list goes on and on. The role of the teacher will be monumental, indeed.

Some of the most substantive changes have taken place in special education, ushered in by the Alberta Education (2009) publication *Setting the Direction Framework.* That document heralded the end of the traditional special education system, calling for "one inclusive education system where each student is successful" (p 5). While the Alberta Teachers' Association's (2014) *Report of the Blue Ribbon Panel on Inclusive Education in Alberta Schools* revealed that the implementation of these changes has been deeply flawed, all is not lost:

> It is not too late to make a difference and create systems and spaces where support for inclusion is part of how we live in schools and in our province. We can still create access to quality education and environments where all students are able to learn. It is the teacher's responsibility to help students learn, and everyone and everything in the system should support the teacher in ensuring that this takes place. (p 83)

To underscore our specialist council's commitment to the successful implementation of the inclusive model in Alberta, delegates at the 2014 Special Education Council annual general meeting voted to change the council's name to the Council for Inclusive Education (CIE). This not only reflects the beliefs held by members of the council but also conveys the message that the CIE will strive to meet the needs of all teachers in Alberta, as every teacher faces increasing diversity among students.

As a member of the CIE, you join with approximately 1,700 like-minded educators who are ready to take on the challenge of inclusive education. At the annual conference, hundreds of members have the opportunity to engage in professional development, networking and socializing. (Go to www.specialeducation.ab.ca for more details.)

We also challenge you to become actively involved in your regional, as a participant in the regional's PD opportunities or by assuming a leadership role. By doing so, you will be able to build a network of local teachers who share a vision of education and a willingness to collaborate and debate with colleagues. (Find your regional at www.specialeducation.ab.ca/regionals.)

The council also supports you through its online resources. Visit our website (www.specialeducation .ab.ca) for information about PD and other resources. You can also follow us on Twitter (@atainclusiveed) or on Facebook (www.facebook.com/ATAInclusiveEdCouncil).

REFERENCES

Alberta Education. 2009. *Setting the Direction Framework.* Edmonton, Alta: Alberta Education. Also available at https://education.alberta.ca/media/1082136/sc_ settingthedirection_framework.pdf (accessed September 15, 2015).

Alberta Teachers' Association (ATA). 2014. *Report of the Blue Ribbon Panel on Inclusive Education in Alberta Schools.* Edmonton, Alta: ATA. Also available at www .teachers.ab.ca/SiteCollectionDocuments/ATA/ News-Room/2014/PD-170-1%20PD%20Blue%20 Ribbon%20Panel%20Report%202014-web.pdf (accessed September 15, 2015).

Council for Inclusive Education executive

Editorial Review Committee

Thank you to the following peer reviewers, who gave their time and expertise to review articles for *The Inclusive Educator Journal.*

Pamela Adams
University of Lethbridge

Jac J W Andrews
University of Calgary

Linda Chmiliar
Athabasca University

Nancy Grigg
University of Lethbridge

Lynn McQuarrie
University of Alberta

Stephen Murgatroyd
Communications and Consulting

Our thanks also go to Joni Turville, for her contributions to the creation of this journal.

Standardized Achievement Tests and Inclusive Education: A Match Not Made in Heaven

Joni Turville, Alberta Teachers' Association

Teachers have had a long-standing discomfort with and resistance to the government-held belief that pedagogy should be standardized and measured through testing. In his article "When Schools Become Dead Zones of the Imagination: A Critical Pedagogy Manifesto," Henry Giroux (2013) postulates that "critical pedagogy must reject teaching being subordinated to the dictates of standardization, measurement mania and high stakes testing. The latter are part of a pedagogy of repression and conformity and have nothing to do with an education for empowerment."

These thoughts are of particular interest to me as Alberta's ministry of education moves from standardized provincial achievement tests (PATs), which are administered in core subject areas to students in Grades 3, 6 and 9, to student learning assessments (SLAs). Are these new assessments an attempt to provide information for planning, as advertised, or will they perpetuate schools as "testing hubs that de-skill teachers and disempower students" (Giroux 2013)? And if the aim of public schooling is to provide equity of opportunity for all, will this new way of assessing provide support for or subjugate those who are already disadvantaged?

My own experience with high-stakes provincial tests came when I was teaching elementary school. Teachers would ask to teach grades other than Grades 3 and 6—the grades where the PATs were administered. I felt great discomfort with having to subject eight-year-olds to multiple hours and days of tests.

Particularly troubling was when I had students for whom significant modifications and adaptations were required for everyday work, only to find that they had to write a standardized exam along with their peers—hardly a policy that supports all learners in an inclusive system. On rare occasions, students could be exempted from taking the test, but exemption was difficult and time-consuming to attain, if it could be attained at all. Other students, some who were on individualized program plans (IPPs) and some who were not, experienced great difficulty and frustration when writing the exams. I witnessed tears and, sometimes, refusals to engage. Some students would play along by colouring a lovely pattern on the bubbles of their machine-scored sheets.

In addition, the tests were administered at the end of the school year, so the information gleaned was not useful for instruction and, instead, was transported into "accountability pillar" measures for schools and jurisdictions. I confess that, since the results had far-reaching implications, I felt pressured to ensure that my students were ready to write the exams—not an uncommon phenomenon (Moon et al 2007; Sahlberg 2004). For example, the media reported how schools had performed on the Grades 3, 6 and 9 PATs, and when I taught in a small school, the finger pointed directly at me, because I was the only teacher of one of those grades. If I had a particularly large number of students with exceptionalities, I felt even more stress.

I was delighted to hear that the government would be eliminating PATs, and I was intrigued to consider the benefits of a different approach. In a system where some parents shop for schools based on published test

scores, and where children are rendered as commodities (students-as-dollars), these tests have high stakes not only for students but also for teachers caught in a marketized system.

In May 2013, the then minister of education, Jeff Johnson, announced that Alberta Education would provide additional tools to help students succeed and that the existing PATs would be replaced by SLAs. The stated purpose of the new SLAs is to

> provide students, teachers, and parents with information at the beginning of the school year to plan for learning. Collecting and receiving the information at this point in the school year, rather than at the end, will serve as useful reference for everyone and enable collaboration between parents and teachers to support student learning during the year.[1]

One part of the test is administered digitally through multiple-choice questions, and the other part is a performance-based assessment, administered by the teacher, that is meant to provide a more holistic view of the student. If we take the purpose statement at face value, it appears that the assessments have the potential to create formative assessment information that could be helpful in planning for learning and in fostering engaging conversations between students, teachers and parents.

The feedback from teachers regarding the SLA pilot that took place in September 2014 for Grade 3 students was overwhelmingly negative. One teacher, who taught at a Hutterite colony, was instructed to give students 40 printed pages of screenshots to write on, because the colony does not permit computers in the school. These students were English-language learners. For the parts of the test that involved interactive video, the teacher was provided with a script that directed her to make sound effects (such as a bouncing ball or ice skates).

Another teacher discussed the performance-based assessment she had to administer—specifically, a question that prompted students to think about how

❝ Standardized tests presume that children can and should be standardized. Anyone who has lived in a classroom full of students knows that standardization is not only impossible but also undesirable. ❞

they would spend $75 at a pet store. One student, new to Canada, said, "I guess I could buy something small, but then we would have to spend the rest on groceries," revealing the cultural bias common in standardized tests. The tests take the perspective of the dominant culture, disadvantaging some students and perpetuating social inequities (Giroux 2013; Viruru 2006).

The SLAs are said to provide information that will assist in developing programs and strategies to support student learning during the school year, but teachers reported that the data they received back did not do this during the first year of the pilot and that the links to curriculum, which has also been undergoing revisions, were weak. Teachers noted the problems associated with the digital portion of the tests, including not enough computers in the school and a lack of bandwidth to complete the tests. In addition, students early in the Grade 3 year (seven- and eight-year-olds) had to sit in front of a computer for up to three and a half hours to complete the test, which is not remotely appropriate, developmentally (Ernest et al 2014; Smyth 2008). Teachers also expressed concern about how the results were going to be used and reported. Were these simply to be PATs administered at a different time of year in a different format, gleaning data that would be used for purposes other than creating effective programming?

Standardized tests presume that children can and should be standardized. Anyone who has lived in a classroom full of students knows that standardization is not only impossible but also undesirable. Giroux (2013) views standardized tests as a tool that perpetuates the repression of those who are disadvantaged. The true purpose of pedagogy, he says, is to develop "autonomous, critical, and civically engaged students." Multiple-choice questions and narrowly defined assessments don't allow students to show the many ways of knowing and of demonstrating learning, nor can they capture divergent, creative thinking—qualities seen as important for 21st-century learners (Collard and Looney 2014; le Cordeur 2014). Furthermore, teachers are asked to differentiate

instruction for students, but the tests don't meet the same standard. Giroux believes that the move to standardize teachers, students and schooling is destructive. He states,

> At the core of the new reforms is a commitment to a pedagogy of stupidity and repression that is geared toward memorization, conformity, passivity, and high stakes testing. Rather than create autonomous, critical, and civically engaged students, the un-reformers kill the imagination while depoliticizing all vestiges of teaching and learning.

Whether standardized tests occur at the beginning or the end of the school year, they presume that students can all achieve an artificial standard by virtue of their grade level. If we are to empower teachers to reach all students, regardless of background, culture or ability, teachers must be given the professional autonomy to make judgments about what is appropriate. We must not quash trust, imagination and creativity through a culture of standardization. If SLAs, now portrayed as formative assessments, will be used in a summative, evaluative manner, as were PATs, then the government will simply be replicating past mistakes. We must ask ourselves whether this large-scale testing supports the students or serves the system.

As of this writing, the new education minister, David Eggen, has announced that a second year of the SLA pilot will continue, with optional implementation, and participation will be decided at the school jurisdiction level. The effectiveness of these assessments remains to be seen, and the devil will be in the details.

NOTE

1. Fromwww.education.alberta.ca/admin/testing/student-learning-assessments.aspx (accessed July 2014).

REFERENCES

Collard, P, and J Looney. 2014. "Nurturing Creativity in Education." *European Journal of Education* 49, no 3 (September): 348–64.

Ernest, J M, C Causey, A B Newton, K Sharkins, J Summerlin and N Albaiz. 2014. "Extending the Global Dialogue About Media, Technology, Screen Time, and Young Children." *Childhood Education* 90, no 3: 182–91.

Giroux, H A. 2013. "When Schools Become Dead Zones of the Imagination: A Critical Pedagogy Manifesto." *Truthout,* August 13. www.truth-out.org/opinion/item/18133-when-schools-become-dead-zones-of-the-imagination-a-critical-pedagogy-manifesto (accessed July 21, 2015).

le Cordeur, M. 2014. "Constantly Weighing the Pig Will Not Make It Grow: Do Teachers Teach Assessment Tests or the Curriculum?" *Perspectives in Education* 32, no 1: 138–53.

Moon, T R, C M Brighton, J M Jarvis and C J Hall. 2007. *State Standardized Testing Programs: Their Effects on Teachers and Students.* Storrs, Conn: University of Connecticut, National Research Center on the Gifted and Talented.

Sahlberg, P. 2004. "Teaching and Globalization." *Managing Global Transitions* 2, no 1 (Spring): 65–83.

Smyth, T S. 2008. "Who Is No Child Left Behind Leaving Behind?" *The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 81, no 3: 133–37.

Viruru, R. 2006. "Postcolonial Technologies of Power: Standardized Testing and Representing Diverse Young Children." *International Journal of Educational Policy, Research, and Practice: Reconceptualizing Childhood Studies* 7, no 1: 49–70.

Supporting School Participation: Lessons Learned from a Youth with a Mild Intellectual Disability

Gabrielle Young, Memorial University of Newfoundland

Jacqueline Specht, Western University

The *International Classification of Functioning, Disability and Health* defines *participation* as "involvement in life situations" and regards it as an essential aspect of health and well-being (World Health Organization 2001). Participation is crucial to the healthy adjustment of children, as it enables them to learn how to communicate and get along with others, build friendships, and develop the skills they need to be successful in their lives (Law et al 2007).

Increased participation in school has been linked to a number of positive outcomes, including greater academic achievement, fewer behavioural problems, lower rates of school dropout and increased involvement in social activities during early adulthood (Ahlström 2010; Bartko and Eccles 2003; Darling, Caldwell and Smith 2005; Fredricks et al 2002; Guèvremont, Findlay and Kohen 2008; Sandler et al 2004; Simeonsson et al 2001).

The likelihood of involvement in extracurricular activities is associated with factors such as family structure, family income, and urban versus rural residence (Guèvremont, Findlay and Kohen 2008). Research indicates that only 3 per cent of the 4.4 million Canadians with disabilities are participating in organized physical activity (Canada. Standing Senate Committee on Human Rights 2012). Children with disabilities engage in recreational and leisure activities less often than children without disabilities (Guèvremont, Findlay and Kohen 2008; Law et al 1999; McWilliam and Bailey 1995; Simeonsson et al 2001), which puts them at risk for negative life outcomes such as low self-esteem, depression and anxiety.

If participation increases both the academic and the social development of students (Ahlström 2010), it would be beneficial for educators to promote children's participation in school through involvement in classroom lessons, games, sports and social events.

DATA COLLECTION METHODS

The current research details the case study of Ken, a boy who was in Grade 7 in a regular education classroom at the beginning of the data collection. We followed him through Grade 10, using both questionnaires and interviews.

Case study research provides rich information about a topic (Fiese and Bickham 1998) and is especially suited to an in-depth exploration of complex issues that are not well understood.

It is especially important to understand the connection between the adolescent, the home and the school, as the source of the student's success or failure in school is often located in one or more of those places (Pianta and Walsh 1998). We met with Ken (who had a mild intellectual disability), his parents and his teachers individually each year for 45–60 minutes to gather information that provided an understanding of Ken's opportunities for school participation and the barriers and facilitators to that participation.

Research shows that by Grade 7 or 8 there is a decline in school adjustment measures such as academic achievement (Roeser, Midgley and Urdan 1996) and that the transition to Grade 9 is especially difficult for children with disabilities. Given the issues with this age group, we decided to start collecting data on Ken when he was enrolled in an inclusive, general education classroom in Grade 7 and to follow him through Grade 10. A longitudinal approach was implemented, as competencies can change with time (Pianta and Walsh 1998). By following Ken for four

years, we were able to determine how his school participation changed as he transitioned from elementary to secondary school.

KEN'S PROFILE

Ken enjoyed athletics and was kind and eager to please. He also had a mild intellectual disability. In elementary school, he was on a modified program, and in secondary school, he was enrolled in locally developed courses, as his thinking and reasoning skills were at a lower level than those of his peers. Ken's disability also affected his communication skills; he had difficulty understanding and communicating with other students. He also had difficulty interpreting social cues and, because of his inappropriate behaviour, he was ridiculed and bullied by his peers. His teachers suspected that he didn't have any real friends: "There's nobody that he would call or have over on the weekend or after school."

Family Background

Ken lived with both of his parents and his younger brother, who had a behaviour disability. His family was socioeconomically disadvantaged because both parents had been unemployed for a period of time. His mother said that they couldn't afford to enrol him in community sporting events: "Right now, with my husband out of work and myself not working, you can't always say, 'You can go take part in that.'"

Academic Difficulties

The ABILITIES Index was designed by Simeonsson and Bailey to describe the functional abilities and limitations of children.[1] Ken's teachers used this index to identify whether his attributes were normal for his age or whether he had suspected, mild, moderate or severe limitations.

As indicated by the ABILITIES Index, Ken had a mild to moderate functional limitation in terms of his thinking and reasoning skills. He had an individual educational plan that outlined how academic subjects were to be modified for him. His mother said that he did not feel like he was a member of his peer group: "He's always being taken away. You know, 'Let's go here and do this project and let them do theirs.'" Ken and his peers recognized that he had difficulties with learning. When asked how his peers would describe him, Ken said, "Stupid. . . . They don't realize I have a developmental disability, so they think I'm stupid."

Social Difficulties

As indicated by the ABILITIES Index, Ken also had a mild to moderate functional limitation in terms of behaviour and social skills. He exhibited inappropriate social behaviour, which caused him to be treated poorly by his peers. His Grade 7 teacher said, "He's a bit of a class clown, because he does stuff to get attention from the kids, and sometimes they will laugh, but they're definitely laughing at him, not with him."

On the ABILITIES Index, Ken's teachers noted that he had a mild to moderate functional limitation with regard to intentional communication, as he had difficulty understanding and communicating with others. His difficulty reading social cues made it hard for him to determine if someone was interested in being his friend. Ken's Grade 8 teacher said, "He really tries to integrate with the other students, but he has difficulty with social cues. He tries so hard to please the other kids, or impress them, but he goes about it the wrong way."

The Strengths and Difficulties Questionnaire (Goodman 1997) is a behavioural screening instrument that assesses emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behaviour.[2] It can be administered to show how students' and teachers' ratings of students' behaviour might be associated with involvement in activities at school. In completing the questionnaire, Ken and his teachers noted that his problems with his peers were in the borderline abnormal range. His difficulty making friends was indicated when his Grade 8 teacher said, "There are a lot of really great kids at the school who do include him at recess if they are playing soccer or basketball. He is involved, but I don't know how intimately involved his relationships are with any of the students."

The Social Support Scale for Children (Harter 1985) measures social support from four categories of people in a student's life: parents, classmates, teachers and friends. This instrument was administered to show how Ken's perceptions of supportive relationships might be associated with his involvement in activities at school. Ken perceived his peers as being much less supportive than did students from the standardized sample. His difficulties with his peers persisted into secondary school. As his mother said, "I don't see enough interaction with him. He gets a lot of bullying." Although Ken's classmates may have been respectful toward him in class, he was alienated from his peer

group. His Grade 10 teacher said, "Even though those other kids are nice to him in group work, when it comes time to spending their own time with someone, they don't travel towards Ken."

EXAMINING KEN'S SCHOOL EXPERIENCE

Extracurricular Activities

In elementary school, Ken participated in the games club and the homework club. His Grade 7 teacher noted that he chose to go to the games club because it allowed him to interact with other students: "It's kind of a safe place to go as far as knowing that he'll be involved and included. So he likes that." Ken went to the homework club when he had schoolwork to complete, taking advantage of the supports provided. He also participated in the guitar club; however, his participation was limited because he was not able to bring his guitar to school. His Grade 8 teacher expressed hope that the school would purchase guitars for the club, so as to allow students like Ken to participate.

Ken's Grade 8 teacher described student participation in sports-based activities: "It's a semi-competitive team, and when there are a limited number of spots on a team, it doesn't give everyone a chance. The kids that are exposed to it outside of the school have the advantage." Indeed, when it comes to school sports teams, children whose parents can afford to enrol them in sports outside of school have a strong advantage. Ken's lack of exposure to team-based sports and his underdeveloped coordination skills made him unsuccessful when trying out for school teams. By secondary school, Ken had developed low self-confidence and no longer tried out for sporting teams in which he had previously expressed an interest.

Ken said that he wished he was "capable of doing more activities around the school." His mother felt that in elementary school he was not provided with the opportunity to fully participate: "There are a lot of programs that go on—sports programs, social programs. It seems like he's never involved in any of those." She hoped for increased participation in secondary school: "Maybe next year he'll start understanding that there's a whole lot more to school. There's friendships, clubs and events. . . . I'd like to see him be part of that school community so that when he does leave, he doesn't miss out on something that everybody else has taken part in."

Opportunities to Help Out

In elementary school, Ken found opportunities to help out by volunteering to walk around and clean the classroom at recess. His Grade 8 teacher said, "He's really good at helping out. He really seeks the positive feedback and the attention." Ken took pride in volunteering his time and sought activities that helped him fulfill his role as a helper. His teacher said, "Ken has been a rainy day supervisor, which is a bit of a leadership role. I think he's pretty good with managing some of the younger students, and he takes that role responsibly." Although Ken was able to help out in elementary school, he was unable to find opportunities to help out in secondary school.

Social Skills Development

Ken had immature social skills. His Grade 7 teacher felt that he "would benefit from social programs on how to talk to peers and deal with different situations." This teacher felt that programming would improve Ken's social skills and self-confidence, so she brought in a social worker to provide workshops on prosocial behaviour. These workshops were beneficial, as they built empathy, reduced bullying and helped Ken move out of the victim role.

Ken's elementary teachers spoke to him on a one-on-one basis about any inappropriate behaviour he exhibited. Through those conversations, he was given guidance on how to pick appropriate friends and how to approach his peers and ask to join group activities. The conversations were effective in improving his behaviours, and his Grade 8 teacher reported that his peers were "more willing to be accepting of him and to let him be involved at recess than they used to be. . . . He's kind of learned that if he asks, the kids will involve him."

Lunch Hour Support

In secondary school, Ken did not participate in extracurricular activities and became increasingly segregated from his peers. He didn't eat his lunch in the cafeteria, because there were "too many kids." Instead, he ate his lunch in the stairwell until his teacher opened up a classroom for him. His Grade 9 teacher said, "I get to class early 95 per cent of the time so that the students that are there can eat, talk and go on the computer when they want. Ken is there every single day." Ken continued to eat his lunch in a classroom in Grade 10. However, he wished that he

were spending his lunch hour with a larger peer group: "I wish I could go downstairs and hang out with everybody, but I'm too afraid to do that." His peers continued to bully him, so he chose to eat his lunch in the classroom, as it provided a supervised location for peer interaction.

Expectations

Ken's mother indicated that as he progressed through school, he became less welcomed in the inclusive classroom. She lamented over the low expectations placed on Ken: "It seems like he's never been allowed to try and succeed at things and to learn. He's always been put into that special needs [category]. . . . I really wish that he had been given the chance to be involved." She attributed his minimal participation in school activities to teachers' lowered expectations and their lack of encouragement.

Teachers hold lower educational expectations for adolescents labelled with learning disabilities than they do for students with similar achievement levels and behaviours who have not been labelled with a disability. These lower expectations contribute to labelled adolescents' lower educational expectations for themselves (Shifrer 2013). Teachers might hold lower educational expectations for students with disabilities because of their academic and social difficulties and their negative academic attitudes and behaviours (Lackaye and Margalit 2006; Shifrer, Muller and Callahan 2011). Research demonstrates a connection between teachers' attitudes and the instructional effort they direct toward students with diverse learning and behavioural characteristics (Cook and Cameron 2010), and the goals teachers set for students affect student performance (Hattie and Timperley 2007). Educators should reflect on the different goals and expectations they hold for students with disabilities and consider how those beliefs may affect student achievement and development (Cameron and Cook 2013).

WHAT WE LEARNED FROM KEN

Structured activities allowed Ken to be involved at school; however, he needed to be encouraged to participate. In Grade 8, Ken discovered that his peers were willing to include him if he asked to participate. Unfortunately, he did not make any new friends in secondary school. Without friends to talk to, he felt overwhelmed and unwelcomed in the school cafeteria.

Ken's teacher opened up her classroom during the lunch hour, but if she was not there, he would opt to eat his lunch alone in the stairwell.

Ken felt that he fit into the school system in his role as a helper. He enjoyed helping his elementary school teachers and assisting younger children with reading and during snack time. Such opportunities were not available to him in secondary school, making it difficult for him to feel like he belonged. The elementary school system was a more supportive environment for Ken, as the smaller school environment enabled teachers to support him in his social endeavours and ensure that he was included in all aspects of the school day.

Ken wanted to be more involved in school; however, he felt overwhelmed in large groups of students and needed supports to participate. In high school, students have various opportunities for participation. While there may not be younger kids who would benefit from a reading buddy or someone to help open their snack, there are other ways to help. Most schools have campaigns around the holidays to help others in need. Ken could also have been involved with the social justice club or other fundraising activities.

While there are a lot of activities that meet the interests of secondary students, students need to have the skills to access them. Although teachers can encourage student participation in extracurricular activities, additional encouragement from a friend or a classmate would further support participation. The transition to secondary school provides the opportunity to further develop one's role; however, students need to be encouraged to participate in activities that fit their interests and align with their roles (such as athlete, leader or helper).

WHAT THIS MEANS FOR STUDENTS WHO HAVE DIFFICULTY PARTICIPATING

Participation is key to the healthy development of children, as it enables them to learn how they fit into society (Law et al 2007). Students with disabilities participate less in school activities and are less involved in social interactions than their peers without disabilities (Carter et al 2008; Egilson and Traustadottir 2009; Eriksson, Welander and Granlund 2007). This is unfortunate because structured activities, such as

participating in class and working for pay, lead to positive development in students with disabilities (Eccles et al 2003; Mahoney, Cairns and Farmer 2003).

Educators are better at providing opportunities to participate in elementary school than in secondary school, but there is still room to improve. The transition from Grade 8 to Grade 9 is difficult for all students, but especially for those with disabilities (Eccles et al 1993). Educators need to pay attention to students who have difficulty self-initiating participation in elementary school and provide support for those students in secondary school. When educators provide transition planning for students moving into secondary school, they tend to focus solely on students' learning needs. However, particular attention should be paid to their social needs and how they will become involved in the life of the school. Students need to feel that they belong and that they are valued, and this must occur throughout their childhood and adolescence so that they can develop into healthy adults.

NOTES

The case study in this article is based on a participant in a research study that was supported by a standard research grant to the second author from the Social Sciences and Humanities Research Council of Canada.

1. See http://fpg.unc.edu/node/365 (accessed August 26, 2015).

2. See www.sdqinfo.com (accessed August 26, 2015).

REFERENCES

Ahlström, B. 2010. "Student Participation and School Success: The Relationship Between Participation, Grades and Bullying Among 9th Grade Students in Sweden." *Education Inquiry* 1, no 2 (June): 97–115.

Bartko, W T, and J S Eccles. 2003. "Adolescent Participation in Structured and Unstructured Activities: A Person-Oriented Analysis." *Journal of Youth and Adolescence* 32, no 4 (August): 233–41.

Cameron, D L, and B G Cook. 2013. "General Education Teachers' Goals and Expectations for Their Included Students with Mild and Severe Disabilities." *Education and Training in Autism and Developmental Disabilities* 48, no 1 (March): 18–30. Also available at http://daddcec.org/Portals/0/CEC/Autism_Disabilities/Research/Publications/Education_Training_Development_Disabilities/ETADD_48(1)_18-30.pdf (accessed August 14, 2015).

Canada. Standing Senate Committee on Human Rights. 2012. *Level the Playing Field: A Natural Progression from Playground to Podium for Canadians with Disabilities.* Ottawa: Senate Canada. Also available at www.parl.gc.ca/Content/SEN/Committee/411/ridr/rep/rep07jun12-e.pdf (accessed August 18, 2015).

Carter, E W, L G Sisco, L Brown, D Brickham and Z A Al-Khabbaz. 2008. "Peer Interactions and Academic Engagement of Youth with Developmental Disabilities in Inclusive Middle and High School Classrooms." *American Journal on Mental Retardation* 113, no 6 (November): 479–94.

Cook, B G, and D L Cameron. 2010. "Inclusive Teachers' Concern and Rejection Toward Their Students: Investigating the Validity of Ratings and Comparing Student Groups." *Remedial and Special Education* 31, no 2 (March/April): 67–76.

Darling, N, L L Caldwell and R Smith. 2005. "Participation in School-Based Extracurricular Activities and Adolescent Adjustment." *Journal of Leisure Research* 37, no 1: 51–76.

Eccles, J S, B L Barber, M Stone and J Hunt. 2003. "Extracurricular Activities and Adolescent Development." *Journal of Social Issues* 59, no 4 (December): 865–89.

Eccles, J S, C Midgley, A Wigfield, C M Buchanan, D Reuman, C Flanagan and D Mac Iver. 1993. "Development During Adolescence: The Impact of Stage-Environment Fit on Young Adolescents' Experiences in Schools and in Families." *American Psychologist* 48, no 2 (February): 90–101.

Egilson, S T, and R Traustadottir. 2009. "Participation of Students with Physical Disabilities in the School Environment." *American Journal of Occupational Therapy* 63, no 3 (May/June): 264–72.

Eriksson, L, J Welander and M Granlund. 2007. "Participation in Everyday School Activities for Children With and Without Disabilities." *Journal of Developmental and Physical Disabilities* 19, no 5 (October): 485–502.

Fiese, B H, and N L Bickham. 1998. "Qualitative Inquiry: An Overview for Pediatric Psychology." *Journal of Pediatric Psychology* 23, no 2 (April): 79–86.

Fredricks, J A, C J Alfeld-Liro, L Z Hruda, J S Eccles, H Patrick and A M Ryan. 2002. "A Qualitative Exploration of Adolescents' Commitment to Athletics and the Arts." *Journal of Adolescent Research* 17, no 1 (January): 68–97.

Goodman, R. 1997. "The Strengths and Difficulties Questionnaire: A Research Note." *Journal of Child Psychology and Psychiatry* 38, no 5 (July): 581–86.

Guèvremont, A, L Findlay and D Kohen. 2008. "Organized Extracurricular Activities of Canadian Children and Youth." *Health Reports* 19, no 3 (September): 65–69. Also available at www.statcan.gc.ca/pub/82-003-x/2008003/article/10679-eng.pdf (accessed August 25, 2015).

Harter, S. 1985. *Manual for the Social Support Scale for Children.* Denver, Colo: University of Denver.

Hattie, J, and H Timperley. 2007. "The Power of Feedback." *Review of Educational Research* 77, no 1 (March): 81–112.

Lackaye, T D, and M Margalit. 2006. "Comparisons of Achievement, Effort, and Self-Perceptions Among Students with Learning Disabilities and Their Peers from Different Achievement Groups." *Journal of Learning Disabilities* 39, no 5 (September/October): 432–46.

Law, M, M Haight, B Milroy, D Willms, D Stewart and P Rosenbaum. 1999. "Environmental Factors Affecting the Occupations of Children with Physical Disabilities." *Journal of Occupational Science* 6, no 3: 102–10.

Law, M, T Petrenchik, G King and P Hurley. 2007. "Perceived Environmental Barriers to Recreational, Community, and School Participation for Children and Youth with Physical Disabilities." *Archives of Physical Medicine and Rehabilitation* 88, no 12 (December): 1636–42.

Mahoney, J L, B D Cairns and T W Farmer. 2003. "Promoting Interpersonal Competence and Educational Success Through Extracurricular Activity Participation." *Journal of Educational Psychology* 95, no 2 (June): 409–18.

McWilliam, R A, and D B Bailey. 1995. "Effects of Classroom Social Structure and Disability on Engagement." *Topics in Early Childhood Special Education* 15, no 2 (Summer): 123–47.

Pianta, R C, and D J Walsh. 1998. "Applying the Construct of Resilience in Schools: Cautions from a Developmental Systems Perspective." *School Psychology Review* 27, no 3: 407–17.

Roeser, R W, C Midgley and T C Urdan. 1996. "Perceptions of the School Psychological Environment and Early Adolescents' Psychological and Behavioral Functioning in School: The Mediating Role of Goals and Belonging." *Journal of Educational Psychology* 88, no 3 (September): 408–22.

Sandler, I N, T S Ayers, J C Suter, A Schultz and J Twohey-Jacobs. 2004. "Adversities, Strengths, and Public Policy." In *Investing in Children, Youth, Families, and Communities: Strengths-Based Research and Policy,* ed K I Maton, C J Schellenbach, B J Leadbeater and A L Solarz, 31–49. Washington, DC: American Psychological Association.

Shifrer, D. 2013. "Stigma of a Label: Educational Expectations for High School Students Labeled with Learning Disabilities." *Journal of Health and Social Behavior* 54, no 4 (December): 462–80.

Shifrer, D, C Muller and R Callahan. 2011. "Disproportionality and Learning Disabilities: Parsing Apart Race, Socioeconomic Status, and Language." *Journal of Learning Disabilities* 44, no 3 (May/June): 246–57.

Simeonsson, R J, D Carlson, G S Huntington, J S McMillen and J L Brent. 2001. "Students with Disabilities: A National Survey of Participation in School Activities." *Disability and Rehabilitation* 23, no 2: 49–63.

World Health Organization (WHO). 2001. *International Classification of Functioning, Disability and Health.* Geneva: WHO.

Photograph courtesy of Elena La Spina, a primary school teacher in Australia

School Learning Communities: Engaging All Stakeholders

Michelle M Dow, Queen Elizabeth High School, Calgary

For years educators have been discussing the role learning communities play in student achievement. Researchers have evaluated the importance of professional learning communities and communities of schools as they engage parents and community members as partners. There has been considerable debate about what these communities look like and feel like and whether they, in fact, lead to student achievement (Corter and Pelletier 2004; DuFour 2004; Epstein and Salinas 2004; Harris and Goodall 2008; Zuniga and Alva 1996). What is a school learning community? What are the advantages of creating one?

Schlechty (2009, 190) posits that a "community is not a place. It is an orientation and a source of personal identity, as well as group affiliation." Communities foster a sense of belonging, a common identity and association; members of a community share the same values and destiny. A school learning community, therefore, involves the identity of the school and the relationships between the various groups that make up its members. It seeks to further the goals and live out the values of the school's members. As Epstein and Salinas (2004, 12) write, "A school learning community includes educators, students, parents, and community partners who work together to improve the school and enhance students' learning opportunities." These stakeholders strive to facilitate student growth and develop learner outcomes. Together, they make decisions that consider district initiatives and educational mandates to create learning environments that will meet the needs of the students and enrich the school community.

ENGAGING PARENTS

Parental engagement, community involvement and increased teacher leadership have been noted as key elements in fostering student achievement and developing strong school communities (Epstein and Sheldon 2002, 2006; Stelmach 2004; Weiss, Lopez and Rosenberg 2011). Parental engagement and efficacy are key contributors to school reform; however, parents are most often engaged in superficial roles, such as volunteering to help with school activities or participating in school-initiated functions (Lopez, Scribner and Mahitivanichcha 2001). Research suggests that parents should be engaged in ways beyond merely inviting them into the school; they need to be taught about education (Leithwood and Louis 2012).

What is parental engagement and what does it look like? Traditionally, parental engagement (or parental involvement) has been viewed as the time parents spend volunteering in classrooms or on class trips, or performing duties such as fundraising or participating on school advisory committees. Parents have typically not been viewed as equals partnering with school leaders to facilitate learner outcomes or to develop and maintain the vision of the school. Factors that create barriers to, or at least minimize, parental involvement include socioeconomic status, level of education, time constraints and immigrant status (Harris and Goodall 2008; Lopez, Scribner and Mahitivanichcha 2001). Schools and districts have been challenged to develop innovative ways to connect with parents and view them in light of their contexts and needs, instead of dismissing them as not being interested. Research has moved schools away from the traditional view of parental engagement by providing evidence that increased parental involvement in decision making and educational discourse at the school and district levels has a positive impact on student achievement (Epstein and Salinas 2004; Lee and Bowen 2006; Zuniga and Alva 1996). This has compelled many schools and districts to develop programs and establish mandates to change the way parents are engaged in student learning, such as the Alberta Initiative for School Improvement (AISI Education Partners 2012) and the 2001 *No Child Left Behind Act* in the United States.

Parents are important to successful school reforms. Student achievement is determined not only by what is learned at school but also by how that learning transpires into experiences and meaningful interactions with parents and community members. Harris and Goodall (2008) argue that parents are key contributors to student success and, in fact, are "the most important influence on learning" (p 286). Epstein and Sheldon (2006) posit that the school, the family and the community share the responsibility for student development and learning; therefore, parents are part of a school, family and community partnership, not merely involved. They further argue that educators need to consider how they communicate, connect and work with families and the community to help students succeed to their full potential.

Parental engagement theories have evolved from simply including parents in school activities to developing partnerships between the school and the family and between the school and the community. These ties, when established, prove to be pedagogically sound. Educators are finding that if what students are learning is meaningful to their interests and experiences, they tend to be more motivated to learn (Robinson 2011). Connecting curriculum to student and community values is a positive and effective way of engaging students, families and communities in facilitating learner outcomes. Furthermore, "when families feel that their involvement is valued and needed, they are more likely to develop active partnerships with school staff in support of student learning" (Weiss, Lopez and Rosenberg 2011, 3). Schools must understand the needs of parents and develop respect for the cultural values and beliefs of their families and the community. This, however, is not common practice, and the parents who are more visible at the school tend to be viewed as caring more about participating in school events or activities, thus limiting the involvement of marginalized families.

To help educators develop stronger school–family–community partnerships, Epstein and Salinas (2004) have developed a framework that identifies six types of parental involvement: parenting, communicating, volunteering, learning at home, decision making and collaborating with the community. These principles incorporate practices from the school–home–community partnership model, supported by the theory of overlapping spheres of influence. This theory "asserts that students learn more

and succeed at higher levels when home, school, and community work together to support students' learning and development" (Epstein and Sanders 2006, 87). Each of the six principles, however, requires different engagement practices. In addition, each principle leads to a different level of parental engagement and different outcomes for the school, teachers and families.

The core business of schools and school districts is providing education and improving the school environment to enhance learning opportunities and outcomes. School leaders, therefore, need to find a way to initiate changes in their schools and educate their staff, parents and community members about what it means to engage in collaborative and collective leadership. In so doing, they will ensure that student achievement remains at the forefront of all school decisions.

COMMUNITY PARTNERSHIPS

The role of parents in education is but one aspect of stakeholder involvement with regard to student achievement. Community partnerships are another thread, connecting schools to families, as well as to the values and beliefs of the community, and fostering additional support for student achievement. Zuniga and Alva (1996, 16) recommend that schools identify and evaluate the strengths and resources in a community by examining its "funds of knowledge," which represent a "social and intellectual resource for schools and the community." Parents can give teachers and schools access to the community and help them identify resources that are valuable to parents and community members (Benson et al 1998; Sanders 2003). In this way, parents and the community become engaged in the teaching and learning process.

The idea of community engagement in schools has led to considerable debate about the lack of expertise of community members. Schlechty (2009, 189) argues that "if local citizens are not sufficiently informed to make decisions about what children should learn in school, the answer is to educate the citizens rather than take power from them." Engaging parents and community members in the education process not only demonstrates openness to other stakeholder voices but also promotes a sense of belonging. While some might question the appropriateness of community members' involvement in learning and the decision-making

process of schools, the opportunities that arise as a result of connections to the community cannot be denied, and their impact on student achievement should not be minimized. Students are more likely to thrive if there are enough bridges to make learning more familiar (Robinson 2011).

Supporters of school–community partnerships emphasize effective school functioning, economic competitiveness, student well-being, and community health and development as significant reasons for schools and districts to develop these relationships (Sanders 2003). Communities provide schools with access to people and other resources they otherwise may not have. Community involvement also strengthens a school's ability to prepare students for the workforce and fosters opportunities for students to increase their social capital, which is necessary for healthy development (Sanders 2003). Community collaborations support healthy environments for students, as they provide strong socioeconomic and service infrastructures (Benson et al 1998).

OVERCOMING BARRIERS TO DEVELOPING PARTNERSHIPS IN SCHOOLS

Even with the mounting evidence in support of school–family–community partnerships, many districts and schools still engage parents in traditional ways and involve the community only when it serves their needs. Although efforts to engage families and communities exist in several districts, it is important to highlight the factors that hinder educators in developing school–family–community partnerships (Tschannen-Moran 2001). Despite the efforts of educational leaders, overcoming these challenges is not without frustration and some level of resistance.

Parental involvement in school events or on parent councils is not enough to improve student achievement. As Robinson (2011, 135) writes,

> If the purpose of engaging the community is educational benefit for children, then leaders' efforts should go into involving parents in ways that create a stronger educational partnership between the school and its parents because that is the strategy that is most likely to deliver the intended results.

Schlechty (2009) contends that educational leaders need to work toward building trust and confidence within the community. Moreover, he suggests that "school principals and school faculties should be oriented to understand their critical role in building community understanding of educational issues" (p 203). In order for students to feel empowered and connected to the school, there must be a consistent voice from and presence of adult stakeholders (Benson et al 1998).

In the traditional top-down decision-making model, teachers, parents and community members often feel excluded from educational decisions. In contrast to the traditional model, "school–family–community partnerships are collaborative initiatives or relationships among school personnel, parents, family members, community members, and representatives of community-based organizations such as businesses, churches, libraries, and social service agencies" (Bryan 2005, 220). Nevertheless, schools face many obstacles in creating strong partnerships. Factors identified as significant influences on parental engagement, for example, include the parents' socioeconomic status, emotional capital, prior education, work commitments and sense of personal efficacy (Harris and Goodall 2008; Lopez, Scribner and Mahitivanichcha 2001). Additionally, among community members there is often a feeling that members shouldn't have a say in how schools operate, as they either do not have the knowledge to help make informative decisions or do not have direct ties to the school (such as children or grandchildren). Likewise, teachers are viewed either as not having the expertise to make key educational decisions or as lacking the self-efficacy and trust to make leadership decisions.

Several factors build or diminish school–family–community partnerships. The level of parental engagement, which is greatly dependent on a family's circumstances, can limit communication between the school and the home. The most significant factors affecting parental engagement are socioeconomic status and level of education (Tschannen-Moran 2001). Family structure and time constraints (because of work and childcare limitations) also have a tremendous influence on school–family partnerships (Tschannen-Moran 2001). Some parents are unable to attend parent–teacher conferences or participate in school activities, which leads to those parents being viewed

as apathetic or hard to reach. Furthermore, there are varying perspectives on what the role of parents should be (Harris and Goodall 2008; Lopez, Scribner and Mahitivanichcha 2001).

Bryan (2005) contends that developing trust between the home and the school is difficult because of negative experiences parents may have had with schools. She argues that "there must be a shift from seeing parents as peripheral to education, and as deficient, to seeing them as valuable resources and assets to the school and as having a shared responsibility and equal capacity to contribute to the education of their children" (p 222). Keth (1996, 240) notes that "partnerships with parents and community members tend to cast them in the role of service recipients and willing supporters of school practices—as the objects of change rather than as change agents." The marginalization and disempowerment of families and communities in relationship with schools is noticeable throughout the education system. A leading challenge for educators is identifying who is considered a participating stakeholder, what their participation looks like, and how their participation is synchronized to develop learner outcomes and promote student achievement.

BUILDING TRUST

Trust is a building block of good leadership and collaboration. It instills confidence, demonstrates a sense of support and belonging, and develops relationships. It is essential that leaders foster relationships that build trust and support meaningful collaboration. School learning communities involve many stakeholders (Epstein and Salinas 2004). Therefore, leaders must be purposeful in how they engage all stakeholders and, above all, build relational trust. Robinson (2011) explains that the level of trust between the members of a school community has a significant impact on their level of collaboration, which plays an integral role in the social and academic progress of students.

Leaders build trust through collaboration. Partnerships are more likely to be established and trust fostered when stakeholders feel that their voice is respected and their experiences and expertise are valued. Parents trust schools when they feel that their concerns are not only heard but also taken seriously: "The knowledge that others care reduces one's sense of vulnerability, increases social affiliation, and invites reciprocal regard" (Robinson 2011, 35). As Tschannen-Moran (2001, 315) writes, "Collaboration and trust are reciprocal processes; they depend upon and foster one another." Teachers trust principals when their work and efforts are appreciated. Principals who provide opportunities for teachers to lead and who support teachers' decisions are more likely to have teacher buy-in and support for school and district initiatives.

LEADING CHANGE

Relationships in a school community are characterized by the respect and collaboration that exist between its members—between teachers and parents, between teachers and students, between teachers and teachers, between teachers and school leaders, and between the school and the community. Trust is built among members through the existence of a safe environment, where all members feel less vulnerable and more supported. Relational trust and collective decision making are crucial to school reform and student-centred leadership (Bryk and Schneider 2002; Robinson 2011). Without trust, building capacity is impossible.

Meaningful educational reform recognizes the impact that family and community engagement has on student achievement. Successful school leaders bring all stakeholders to the table, allowing for equal involvement. They engage in collective leadership, which Leithwood and Jantzi (2012, 11) define as "the extent of influence that organizational members and stakeholders exert on decisions in their schools." Fullan, Bertani and Quinn (2004) maintain that the number of good leaders who are developed and left behind to sustain and advance the work is what indicates successful leaders, not the role they play in student learning. Collective leadership, however, requires leaders to trust their staff, parents, the community and, above all, themselves. Louis et al (2010) contend that teaching and learning can be influenced by the district as a result of the support given to school principals, which contributes to principals' self-efficacy. Like other stakeholders, principals need a strong sense of self-efficacy to advance school reform.

Bandura (1982) discusses self-efficacy (how one perceives and executes one's own ability to deal with

situations) and collective efficacy (the confidence in and the ability of a group to work together). Both are crucial in developing successful school–family–community partnerships. "People who have a sense of collective efficacy will mobilize their efforts and resources to cope with external obstacles to the changes they seek" (p 144). Harris and Goodall (2008) posit that parents' sense of self-efficacy is a contributing factor to their engagement with the school. They argue that parents are more likely to be involved if they feel that they make a difference in their child's achievement and if they feel that it is one of their responsibilities as a parent. Efficacy affects the choices a person makes and the amount of effort applied when dealing with challenges or failure (Leithwood, Mascall and Jantzi 2012). "Collective efficacy is rooted in self-efficacy" (Bandura 1982, 143). Whether it be parents, teachers, school leaders or community members, efficacy contributes to the degree of collaboration and amount of work expended by stakeholders.

Relational trust and efficacy are only two components of successful leadership. Other significant factors that have an impact on school reform are district-level support and the ability of school leaders to build capacity and empower teachers, as well as parents. Gordon and Louis (2012) argue that districts have tremendous influence on the relationship between the school board and the community. The district's role in developing this relationship is critical to creating successful partnerships that support democratic relationships within the organization. They also maintain that, at the school level, principals can further develop a democratic school community and support school improvement by encouraging communication between teachers and families. In addition, principals can nurture a greater sense of accountability in families and the community by viewing them as partners. Tschannen-Moran (2001) posits that when teachers and parents are able to contribute to the decision-making process, better quality decisions are made and teachers, in particular, are more motivated and committed to the decisions.

ORGANIZATIONAL CHANGE

Organizational change can occur in several ways and at various levels. For the purpose of changing a school to create a school learning community, two types of change can occur: revolutionary change (transformational) or evolutionary change (transactional). Burke (2011, 77) says that "the change in mission affects all other primary dimensions of an organization: leadership, strategy, structure, culture, and systems." In the case of a school moving from a top-down form of governance to a school learning community based on collective decision making and partnerships between all stakeholders, the system would need to make revolutionary changes from the district level to the school level to achieve the new mission.

Changes to an organization's deep structure can be intense for those involved and may be met with tremendous resistance. A revolutionary change that seeks to create partnerships between stakeholders requires individuals to reflect on how they perceive stakeholder involvement, as well as how to engage stakeholders in key decisions and change what is normal to them. Organizational changes are often very unsettling for those involved, as they take place at the individual, group and system levels and demand a considerable amount of trust. Tschannen-Moran (2001, 313) notes that "a climate of trust bestows a variety of benefits to the organizations that can foster it." Therefore, changes to the culture and relationships at the district and school levels must consider the voices of the various groups that make up the school's community. Excluding any of those voices can compromise the trust that exists between groups.

CONCLUSION

Many schools have made a commitment to strengthen their school learning communities by creating meaningful partnerships between all stakeholders. Schools that have made this revolutionary change recognize the impact these partnerships can have on student achievement. Successful school reform depends on the ability of stakeholders to collaborate effectively. If leaders hope to transform their organizations, build capacity and encourage social capital, they must seek ways to work with teachers, families and community members to engage in meaningful discourse and develop strategies to address educational issues and learner outcomes. Excluding voices and limiting the participation of stakeholders serve only to derail reform efforts.

REFERENCES

AISI Education Partners. 2012. *Handbook for AISI Cycle 5 Projects, 2012–2015.* Edmonton, Alta: Alberta Education. Also available at http://education.alberta .ca/media/6657808/handbook_for_aisi_cycle_5_ projects.pdf (accessed July 23, 2015).

Bandura, A. 1982. "Self-Efficacy Mechanism in Human Agency." *American Psychologist* 37, no 2 (February): 122–47.

Benson, P L, N Leffert, P C Scales and D A Blyth. 1998. "Beyond the 'Village' Rhetoric: Creating Healthy Communities for Children and Adolescents." *Applied Developmental Science* 2, no 3: 138–59.

Bryan, J. 2005. "Fostering Educational Resilience and Achievement in Urban Schools Through School–Family–Community Partnerships." *Professional School Counseling* 8, no 3 (February): 219–27.

Bryk, A S, and B Schneider. 2002. *Trust in Schools: A Core Resource for Improvement.* New York: Russell Sage Foundation.

Burke, W W. 2011. *Organization Change: Theory and Practice.* 3rd ed. Thousand Oaks, Calif: Sage.

Corter, C, and J Pelletier. 2004. "The Rise and Stall of Parent and Community Involvement in Schools." *Orbit* 34, no 3: 7–12.

DuFour, R. 2004. "What Is a 'Professional Learning Community'?" *Educational Leadership* 61, no 8 (May): 6–11.

Epstein, J L, and K C Salinas. 2004. "Partnering with Families and Communities." *Educational Leadership* 61, no 8 (May): 12–18.

Epstein, J L, and M G Sanders. 2006. "Prospects for Change: Preparing Educators for School, Family, and Community Partnerships." *Peabody Journal of Education* 81, no 2: 81–120.

Epstein, J L, and S B Sheldon. 2002. "Present and Accounted For: Improving Student Attendance Through Family and Community Involvement." *Journal of Educational Research* 95, no 5: 308–18.

———. 2006. "Moving Forward: Ideas for Research on School, Family, and Community Partnerships." In *SAGE Handbook for Research in Education: Engaging Ideas and Enriching Inquiry,* ed C F Conrad and R Serlin, 117–38. Also available at www.csos.jhu.edu/p2000/pdf/ Literature%20Review%20-%20Epstein%20and%20 Sheldon%2006.pdf (accessed August 10, 2015).

Fullan, M, A Bertani and J Quinn. 2004. "New Lessons for Districtwide Reform." *Educational Leadership* 61, no 7 (April): 42–46.

Gordon, M F, and K S Louis. 2012. "How to Harness Family and Community Energy: The District's Role." In *Linking Leadership to Student Learning,* ed K Leithwood and K S Louis, 89–106. San Francisco: Jossey-Bass.

Harris, A, and J Goodall. 2008. "Do Parents Know They Matter? Engaging All Parents in Learning." *Educational Research* 50, no 3: 277–89.

Keth, N Z. 1996. "Can Urban School Reform and Community Development Be Joined?: The Potential of Community Schools." *Education and Urban Society* 28, no 2 (February): 237–68.

Lee, J-S, and N K Bowen. 2006. "Parent Involvement, Cultural Capital, and the Achievement Gap Among Elementary School Children." *American Educational Research Journal* 43, no 2 (June): 193–218.

Leithwood, K, and D Jantzi. 2012. "Collective Leadership: The Reality of Leadership Distribution Within the School Community." In *Linking Leadership to Student Learning,* ed K Leithwood and K S Louis, 11–24. San Francisco: Jossey-Bass.

Leithwood, K, and K S Louis, eds. 2012. *Linking Leadership to Student Learning.* San Francisco: Jossey-Bass.

Leithwood, K, B Mascall and D Jantzi. 2012. "Confidence for School Improvement: A Priority for Principals." In *Linking Leadership to Student Learning,* ed K Leithwood and K S Louis, 107–18. San Francisco: Jossey-Bass.

Lopez, G R, J D Scribner and K Mahitivanichcha. 2001. "Redefining Parental Involvement: Lessons from High-Performing Migrant-Impacted Schools." *American Educational Research Journal* 38, no 2 (June): 253–88.

Louis, K S, K Leithwood, K L Wahlstrom and S E Anderson. 2010. *Learning from Leadership: Investigating the Links to Improved Student Learning.* Final report of research to the Wallace Foundation. Minneapolis, Minn: University of Minnesota. Also available at www.wallacefoundation .org/knowledge-center/school-leadership/key-research/ Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf (accessed August 10, 2015).

Robinson, V. 2011. *Student-Centered Leadership.* San Francisco: Jossey-Bass.

Sanders, M G. 2003. "Community Involvement in Schools: From Concept to Practice." *Education and Urban Society* 35, no 2 (February): 161–80.

Schlechty, P C. 2009. *Leading for Learning: How to Transform Schools into Learning Organizations.* San Francisco: Jossey-Bass.

Stelmach, B L. 2004. "Unlocking the Schoolhouse Doors: Institutional Constraints on Parent and Community Involvement in a School Improvement Initiative." *Canadian Journal of Educational Administration and Policy* 31 (June). www.umanitoba.ca/publications/cjeap/ articles/stelmach.html (accessed August 10, 2015).

Tschannen-Moran, M. 2001. "Collaboration and the Need for Trust." *Journal of Educational Administration* 39, no 4: 308–31.

Weiss, H B, M E Lopez and H Rosenberg. 2011. *Bringing Families to the Table: Recommendations and Next Steps from the National Policy Forum for Family, School, and*

Community Engagement. Cambridge, Mass: Harvard Family Research Project. Also available at www.hfrp .org/family-involvement/publications-resources/ bringing-families-to-the-table-recommendations-and-next-steps-from-the-national-policy-forum-for-family-school-and-community-engagement/ (accessed August 10, 2015).

Zuniga, C, and S A Alva. 1996. "Parents as Resources in Schools: A Community-of-Learners Perspective." *Journal of Educational Issues of Language Minority Students* 16, no 5 (Summer): 16–30. Also available at w w w . n c e l a . u s / f i l e s / r c d / B E 0 2 0 6 4 0 / J E I L M S _ Summer_1996_Volume1613.pdf (accessed August 10, 2015).

Photograph courtesy of Deborah Peralta, a parent at Sunset Elementary School, in San Francisco. The Inclusion Tree is a student's own version of the school's Autism Acceptance Tree, which hangs in the hallway.

School-Based Interventions for Children Diagnosed with ADHD

Caroline Buzanko, University of Calgary

Jac J W Andrews, University of Calgary

The primary feature of attention deficit hyperactivity disorder (ADHD) is a continual pattern of inattention or hyperactivity/impulsivity that is more frequently, intensely and chronically demonstrated by a child or youth than what is typically observed of others of the same age. Problems associated with this disorder include lack of inhibition, synthesis, analysis and self-regulation of behaviour, as well as difficulties with goal directedness, problem solving and cross-temporal organization. Moreover, this pattern of behaviour impairs the child's social, academic and familial activities (Andrews and Istvanffy 2012). Typically, children with attention deficits have difficulty sustaining attention to tasks, following directions and remembering. Children who are hyperactive often have difficulty keeping still and remaining quiet when expected. Children who are impulsive typically have difficulty waiting their turn and withholding their responses (Andrews and Istvanffy 2012).

The purpose of this article is to provide examples of empirically supported school-based interventions for elementary school teachers who have children in their classrooms who are primarily hyperactive or impulsive.

AN OVERVIEW OF ADHD

Children diagnosed with ADHD exhibit pervasive and developmentally inappropriate levels of inattention or impulsivity/hyperactivity (American Psychiatric Association [APA] 2013). ADHD affects approximately 5 per cent of children (APA 2013). Approximately 87 per cent of children with ADHD also meet the diagnostic criteria for at least one other disorder (Canadian Attention Deficit Hyperactivity Disorder Resource Alliance 2011), such as oppositional defiant disorder, conduct disorder, mood disorders and anxiety.

The symptoms associated with ADHD (hyperactive/impulsive type) are believed to be primarily the result of developmental delays in behavioural inhibition that disrupt self-regulation (Barkley 2005). Essentially, children with ADHD have difficulties with delaying their response to an external event; that is, they act before they think. Impairments in behavioural inhibition are thought to disrupt executive functioning in areas such as planning, organization, working memory and self-regulation. As a result, children with ADHD tend to focus on immediate consequences rather than considering long-term consequences.

SCHOOL-BASED IMPAIRMENTS ASSOCIATED WITH ADHD

Children with ADHD exhibit difficulties with impulsivity that often result in problematic behaviours that impair their school functioning. These behaviours include fidgeting excessively, playing noisily, interrupting others, failing to remain seated when expected, having difficulty waiting and bothering other students (APA 2013). Children with ADHD are often less compliant and more negative than children without ADHD (Smith, Barkley and Shapiro 2006) and present with higher rates of off-task behaviours as compared with students without ADHD (Vile Junod et al 2006). These impulsive and disruptive behaviours can impair a child's learning and predict concurrent and later problematic outcomes (such as school failure, underachievement, serious accidents and poor fitness). Thus, behavioural interventions targeting problematic behaviours while promoting more adaptive behaviours are important for facilitating a child's success in the classroom.

Academically, children with ADHD tend to have poor productivity, low rates of accuracy, poor grades and low scores on standardized tests (Loe and Feldman 2007). Additionally, they are at greater risk of being retained during elementary school and of dropping out

of school, and they are less likely to pursue postsecondary education (Frazier et al 2007).

Socially, children diagnosed with ADHD have more difficulties with peer relationships in school than children without ADHD. Research has indicated that children with ADHD present with lower levels of social competence, fewer friends and poorer relationships with others (McConaughy et al 2011). They are at greater risk of being bullied or becoming bullies themselves (Unnever and Cornell 2003). Many of these social difficulties are thought to arise from their difficulties with impulse control. For example, children with ADHD are more likely to interrupt others or to enter peer activities abruptly, thereby disrupting others' activities and upsetting their peers (DuPaul and Stoner 2003). They also tend to be more aggressive than their non-ADHD counterparts (Smith, Barkley and Shapiro 2006).

Given the multitude of difficulties children diagnosed with ADHD have in school, effective school-based interventions are critical to promoting their successful functioning in the school setting.

BEHAVIOURAL INTERVENTIONS

In general, behavioural interventions can reduce problematic, and often disruptive, behaviours in the classroom while promoting the more adaptive behaviours expected of children. Numerous researchers have demonstrated that individualized behaviour modification approaches are effective interventions for children with ADHD (DuPaul, Eckert and Vilardo 2012; DuPaul, Gormley and Laracy 2014; Evans, Owens and Bunford 2014). Figure 1 offers practical guidelines for designing behavioural interventions.

For example, if students engage in attention-seeking behaviours, teach them socially appropriate ways to gain someone's attention, such as saying "Excuse me" or tapping someone on the arm. Reward students when they gain attention appropriately, and ignore problematic attention-seeking behaviours.

Antecedent-Based Strategies

Children with ADHD exhibit an impaired ability to delay responding to the environment (Barkley 2005) and, therefore, benefit from behavioural modifications and immediate contingencies (DuPaul, Weyandt and Janusis 2011). Behavioural modifications often include antecedent-based strategies, which are proactive and focused on preventing problematic behaviours. These approaches also promote alternative behaviours that are more appropriate (DuPaul and Weyandt 2006).

An example of an antecedent-based strategy is explicitly teaching age-appropriate classroom rules (DuPaul, Gormley and Laracy 2014). The most effective classroom rules are those that are created with children's involvement. In addition, the rules should be stated positively (that is, what children should be doing rather than what they should not be doing) and placed where they are easily seen in the classroom (Pfiffner, Barkley and DuPaul 2006). To support children in following classroom rules, the teacher can post the rules in close proximity to them (such as on

Figure 1

Practical guidelines for designing behavioural interventions. Adapted from Fisher, Piazza and Roane (2011).
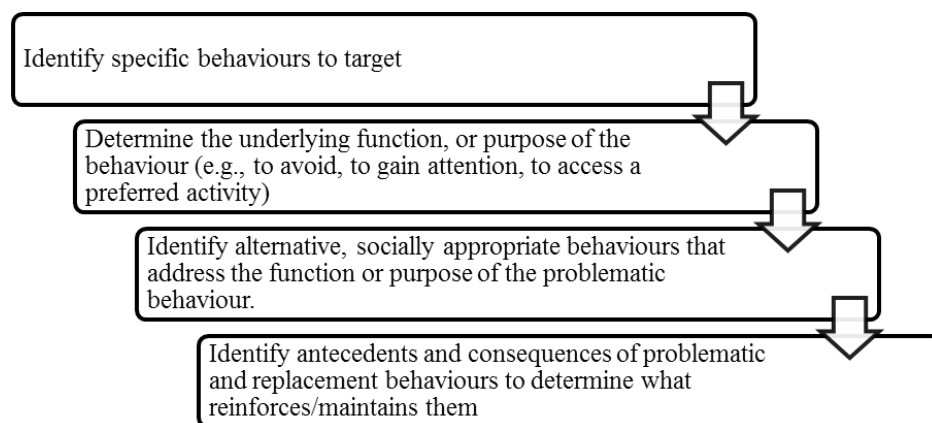
their desks) (Pfiffner, Barkley and DuPaul 2006), provide nonverbal cues to support them in demonstrating adaptive behaviour (Barkley 2015), and review classroom rules regularly throughout the day and at the beginning of a new class activity (DuPaul and Weyandt 2006). Praising children immediately after they follow the rules is also an important strategy in managing behaviour (Pfiffner, Barkley and DuPaul 2006). Researchers also recommend that teachers focus on managing severe disruptions (by providing socially appropriate alternative behaviours) and ignore minor problems (DuPaul, Gormley and Laracy 2014). For example, the teacher may choose to ignore a child's humming while completing a task but correct the child's blurting out of answers during class discussions by reminding the child to raise his or her hand and by providing a visual reminder of the class rule.

The following guidelines for establishing behavioural expectations have been adapted from DuPaul, Gormley and Laracy (2014) and Pfiffner, Barkley and DuPaul (2006):

- Create rules and behaviour expectations collaboratively with children.
- Create only a few rules and make sure that they are positively stated (that is, what students should do rather than what they should not do).
- Explicitly teach expected behaviours (for example, define and model what paying attention looks like).
- Post the rules close to children, where they can be seen throughout the day.
- Praise children whenever they follow the rules.
- Review the rules regularly throughout the day.

Choice making is another antecedent-based strategy effective for reducing disruptive behaviours associated with ADHD. Indeed, children are more engaged in completing academic tasks and exhibit fewer disruptive classroom behaviours when given their choice of academic tasks than when the teacher chooses the assignment (Dunlap et al 1994).

Additional antecedent-based strategies include regularly walking around the classroom to actively monitor the children and providing a visual schedule of classroom activities for the day (DuPaul, Gormley and Laracy 2014). It is also helpful to anticipate when children may have difficulties and to then increase adult hands-on involvement to help children meet behavioural expectations. Some academic interventions, such as adjusting work expectations (for example,

reducing the length of an assignment) and providing reinforcement for work completion, are also antecedent strategies that help reduce off-task disruptive behaviours (DuPaul and Stoner 2003). Developing a strong teacher–student relationship is important in supporting children with ADHD, as this relationship promotes student engagement and compliance in the classroom and positive peer relationships (Power, Tresco and Cassano 2009).

Consequence-Based Strategies

Consequence-based strategies are also effective with children with ADHD. These strategies are reactive and are used to manipulate the environment after a behaviour occurs in order to reduce problematic behaviours or increase appropriate behaviours in the future.

The most common consequence-based strategy is contingent positive reinforcement, such as giving children a token (such as a sticker) or praise for exhibiting a desired behaviour (DuPaul and Stoner 2003). Since the ability to delay responding to environmental events is a key deficit underlying many behaviours exhibited by children with ADHD (Barkley 2005), salient and frequent consequences are necessary to modify or change children's behaviour. In addition to providing frequent rewards, the teacher should individualize reinforcement to ensure that children are motivated by the reward, rotate reinforcement so that children do not become satiated with a reward and provide the reward immediately (as soon as children exhibit the desired behaviour). Smaller immediate reinforcements (such as stickers) can be exchanged for a larger reinforcement (such as earning extra time on the computer) over a day or a week.

Numerous researchers have demonstrated that token reinforcement programs are effective not only for reducing problematic, hyperactive and disruptive behaviours but also for promoting children's academic success in the classroom (DuPaul, Eckert and Vilardo 2012; DuPaul, Gormley and Laracy 2014; Robinson, Newby and Ganzell 1981). For example, Robinson and colleagues implemented a token system requiring children with ADHD to help their classmates. Not only did disruptive behaviours in the classroom substantially decrease but student productivity and academic performance significantly increased. For example, students completed nine times as many assignments with the token system in place.

Despite their effectiveness, reinforcement-based strategies alone are often not sufficient to maintain appropriate levels of academic and social behaviours with children with ADHD. These strategies may be strengthened when coupled with mild punishment contingencies.

An effective punishment contingency is a response cost system, in which students lose a token whenever they engage in problematic behaviours (DuPaul, Guevremont and Barkley 1992). The addition of a response cost system to a positive token reinforcement system is beneficial because it can help increase children's on-task attention and behaviours, as well as their productivity and academic accuracy (DuPaul, Eckert and Vilardo 2012; Smith, Barkley and Shapiro 2006).

Home-based reinforcement for school behaviour, such as a daily school report card or a home–school note, is a variant of consequence-based intervention. This strategy involves identifying behavioural goals children must achieve in school to earn reinforcement at home (Chafouleas, Riley-Tillman and McDougal 2002). In general, differential reinforcement contingencies (DRCs), such as daily report cards, are empirically established as an effective classroom-based intervention for the management of ADHD at home and in the classroom (DuPaul, Gormley and Laracy 2014). DRCs are most effective when there are a few goals targeting both academic and behavioural functioning, when goals are positively stated, and when parents are involved in the planning and implementation process (Chafouleas, Riley-Tillman and McDougal 2002; DuPaul and Stoner 2003).

DRCs are valuable within a comprehensive intervention plan for children with ADHD because they promote communication across settings. For example, daily report cards can facilitate communication between the home and the school and can target key behaviours, such as those related to homework completion, academic performance and peer relations (DuPaul, Weyandt and Janusis 2011). Additionally, they can promote collaboration between teachers, parents and children, which may increase students' accountability from one setting to the next (DuPaul 2007). Moreover, researchers have suggested that children tend to demonstrate better academic achievement when their families are actively involved in school (Power, Tresco and Cassano 2009). Murray et al (2008) have shown not only that daily report cards

are effective in improving the classroom behaviours and academic performance (productivity and skills) of children with ADHD but that they also improve parent–teacher involvement and adherence to intervention. Daily report cards are also thought to be feasible and acceptable for both parents and teachers (Chafouleas, Riley-Tillman and Sassu 2006; Girio and Owens 2009). Hence, they are a practical and suitable intervention for children with ADHD.

The following guidelines for creating a daily report card have been adapted from Chafouleas, Riley-Tillman and McDougal (2002); DuPaul (2007); DuPaul, Weyandt and Janusis (2011); and Murray et al (2008):

- Identify goals for the child to work on. This is best done in collaboration with parents. Focus on a few goals to help build success, and target the child's most disruptive or impairing behaviours.

- Create goals that are positively stated (that is, what the child should be doing instead of what the child should not be doing), that are specific, that are measurable and objective (that is, observable), that are specific to particular situations (for example, a child's difficulty with peers on the playground at recess), that have a criterion (for example, 80 per cent of the time) and that are realistic for the child, teacher and parents.

- Once the goals are identified, check them one more time. Are they specific enough? Are they well defined? Think about the 4Ws: With *whom* does the goal need to happen? Under *what* circumstances? *Where? When?* Be specific.

- Explain the report card to the child. Remain positive and offer a rationale for how it will help the child. Elicit additional feedback or input from the child, especially about strategies to help the child be successful. Keep the discussion collaborative and be open to making changes.

- Establish a reinforcement system. To be the most effective, this system must be done with the child so that the child has input into what reinforcements would be the most motivating. Be sure to create a menu of rewards that the child can choose from, and update this menu regularly. What is rewarding one day may change the next, so variety is important. Privileges are often good rewards.

- Include a daily reward and a weekly reward. The daily reward could be something as simple as a sticker chart that tracks performance for the larger

weekly reward. Additionally, daily praise of the child's efforts and ongoing encouragement must be provided to maintain the child's motivation.

- If the child fails to meet goals, review and practice appropriate behaviours and how you can support the child the next day.

- When working toward the weekly reward, consider creating a reward hierarchy, where the best rewards (A+ rewards) are given when the best behaviours are displayed. Then, have B-level and C-level rewards for effort, even if the child hasn't met the set criteria. In this way, the child can still experience some success, so as to keep up motivation.

- Set up a system to monitor progress daily. The teacher should complete and initial the card daily. At the end of each day, parents can review the card and see if the child is meeting goals in the classroom. Review the daily report cards at the end of the week. Adjust the goals if needed.

- Begin to increase expectations (a little at a time) only when the child is able to consistently meet the outlined goals.

- Be sure to cheer on the child. Point out the child's efforts, even if the goal is not met on a particular day. Recognize successes as much as possible to boost the child's self-esteem, motivation, willingness and confidence.

Self-Regulation Strategies

Despite the effectiveness of behavioural interventions when used at school, the gains made by children with ADHD often fail to generalize to other contexts (Barkley 2005; Smith, Barkley and Shapiro 2006). The benefits of these interventions would be enhanced if similar strategies were used across settings to help support their generalization (Smith, Barkley and Shapiro 2006). Furthermore, although contingency-management programs are beneficial in promoting academic and social success, they may be time-consuming for teachers in busy classrooms.

Researchers have suggested that self-regulation training, in which children learn to monitor, evaluate and reinforce their own behaviours, may be an effective additional strategy because it shifts control of behaviours from the teacher to the child (DuPaul, Gormley and Laracy 2014; Reid, Trout and Schartz 2005). Specifically, this strategy reduces the demands on the teacher while supporting children in maintaining

their improvements over time without ongoing external feedback from others (DuPaul and Weyandt 2006). By self-monitoring their own progress, children may become less reliant on external support and better able to generalize their skills across contexts (DuPaul, Gormley and Laracy 2014). Although more research is needed to evaluate the effectiveness of self-regulation training in the long term, given the difficulties children with ADHD have with response inhibition and self-control, self-regulation interventions may be invaluable in the classroom.

Strategies for teaching and supporting self-monitoring include providing a list of steps for children to refer to, follow and complete, and providing visual reminders for children to stay on task or auditory reminders to monitor whether children are on task (Brock, Jimerson and Hansen 2009).

Figure 2 provides guidelines for teaching children how to self-monitor. Before implementing any self-regulation strategy, it is important that children be expected to self-monitor only with tasks they have already mastered.

ACADEMIC INTERVENTIONS

Although the combination of stimulant medication and behavioural interventions is empirically supported for improving attention and managing problematic behaviours displayed by children with ADHD in school, these interventions have limited effect on academic achievement (DuPaul and Stoner 2003). Thus, there remains a need to also implement interventions that focus on any academic skill deficits children with ADHD may have.

A meta-analysis conducted by DuPaul, Eckert and Vilardo (2012) indicated that academic interventions are associated with positive academic outcomes and are, therefore, a worthwhile pursuit. Part of the success of academic interventions may be that these types of interventions address behavioural difficulties that interfere with learning. For example, some of these interventions can improve children's attentional capacity and reduce their off-task behaviours (DuPaul et al 1998; Lee and Zentall 2002), thus allowing for more learning opportunities for these children.

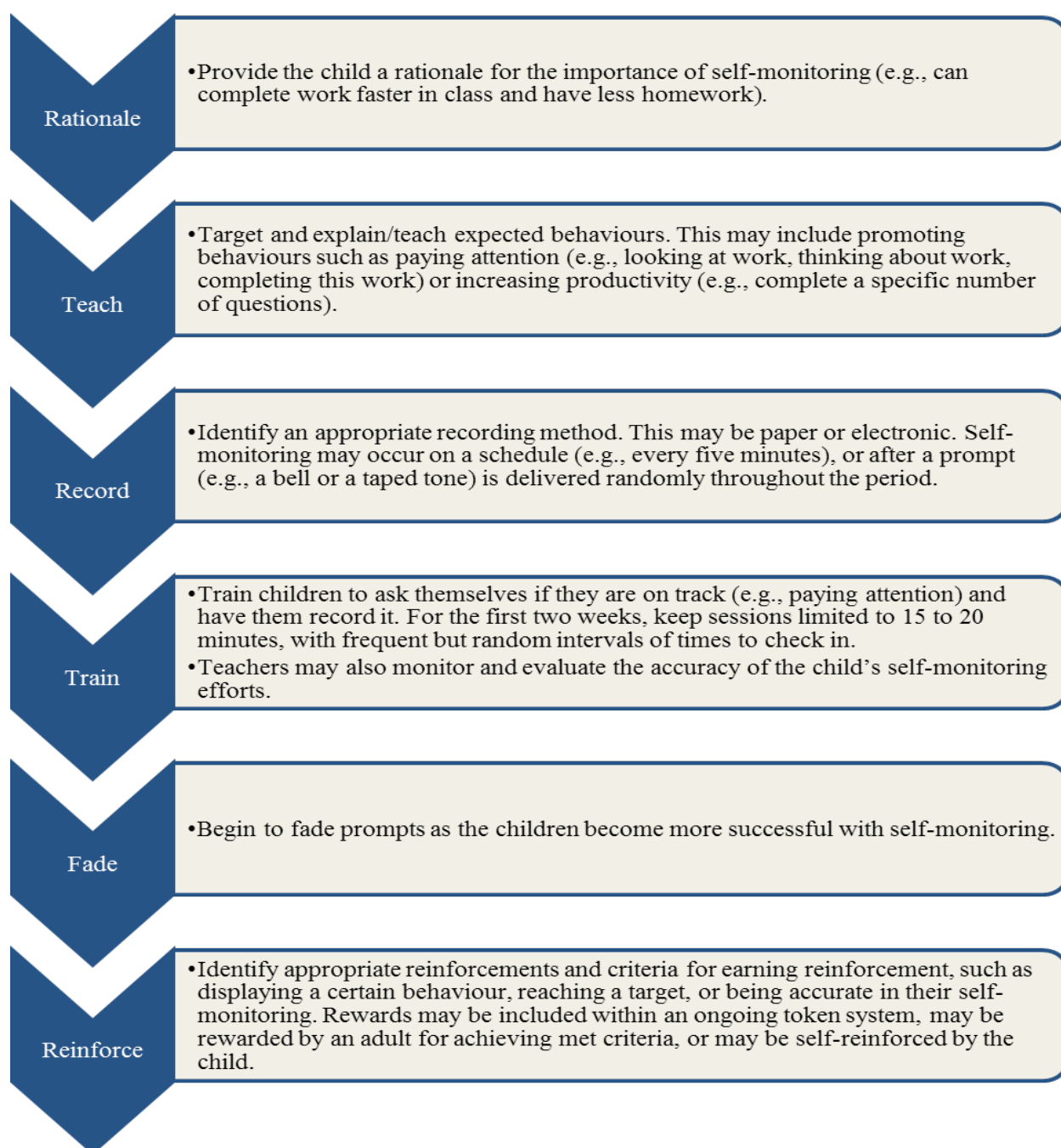### Computer-Assisted Interventions

Researchers have demonstrated that computer-assisted interventions (CAI) can be valuable in

supporting academic success for children with ADHD. For instance, children who received CAI made clinically significant gains in their oral reading fluency (Clarfield and Stoner 2005) and mathematics performance (Mautone, DuPaul and Jitendra 2005). The use of CAI also improved the accuracy of responses and on-task focus of children diagnosed with ADHD (Shaw and Lewis 2005).

Figure 2

Step-by-step overview of how to teach students with ADHD self-monitoring skills. Adapted from DuPaul and Weyandt (2006) and Reid, Trout and Schartz (2005).

Rationale
- Provide the child a rationale for the importance of self-monitoring (e.g., can complete work faster in class and have less homework).

Teach
- Target and explain/teach expected behaviours. This may include promoting behaviours such as paying attention (e.g., looking at work, thinking about work, completing this work) or increasing productivity (e.g., complete a specific number of questions).

Record
- Identify an appropriate recording method. This may be paper or electronic. Self-monitoring may occur on a schedule (e.g., every five minutes), or after a prompt (e.g., a bell or a taped tone) is delivered randomly throughout the period.

Train
- Train children to ask themselves if they are on track (e.g., paying attention) and have them record it. For the first two weeks, keep sessions limited to 15 to 20 minutes, with frequent but random intervals of times to check in.
- Teachers may also monitor and evaluate the accuracy of the child's self-monitoring efforts.

Fade
- Begin to fade prompts as the children become more successful with self-monitoring.

Reinforce
- Identify appropriate reinforcements and criteria for earning reinforcement, such as displaying a certain behaviour, reaching a target, or being accurate in their self-monitoring. Rewards may be included within an ongoing token system, may be rewarded by an adult for achieving met criteria, or may be self-reinforced by the child.

CAI is effective in promoting improved academic performance because it involves a number of elements known to promote on-task behaviours of children with ADHD. Specifically, CAI highlights salient information using additional stimulation (such as colour or animation), specifies the child's learning objectives, chunks tasks into manageable units for the child, minimizes distracting stimuli, and provides immediate feedback and reinforcements for accurate responses (DuPaul and Stoner 2003). In general, this approach is engaging for children with ADHD and helps improve their attention and motivation.

Peer Tutoring

Peer tutoring is also considered an effective academic intervention for improving children's task engagement and academic performance. Similar to CAI approaches, peer tutoring models include common strategies that are recommended for promoting the academic achievement of children with ADHD, such as working at the child's pace, providing continuous prompts for active responding and providing immediate performance-based feedback (Pfiffner, Barkley and DuPaul 2006).

In peer tutoring, a child who is competent in a particular academic area is paired with a child who is having difficulty in that area. The peer tutor should be trained by the teacher in instructional procedures, reinforcement methods and ways to provide feedback. In implementing peer tutoring, teachers can provide the entire class with an overview of learning concepts with respect to the lesson, and then organize groups in which selected tutors can review, modify and perhaps extend the concepts with their peers (Andrews and Lupart 2000).

DuPaul et al (1998) found that classwide peer tutoring, in which all children in a class are paired for tutoring, improved academic performance and prosocial behaviour while reducing off-task behaviour. Subsequent research and meta-analyses have also pointed to the benefits of using peer-mediated interventions on academic functioning for children with ADHD (DuPaul, Eckert and Vilardo 2012; Raggi and Chronis 2006).

Academic Modifications

Although further research is needed, modifying instructional or task demands may be effective in promoting the academic achievement of children with ADHD and reducing problematic off-task behaviours (DuPaul and Stoner 2003).

For instance, Robinson and Skinner (2002) demonstrated that mixing high-demand tasks with low-demand tasks is an effective means to support the acquisition of math skills. Similarly, Lee and Zentall (2002) demonstrated that children with ADHD improved their productivity and accuracy in solving math problems when presented with high within-task stimulation. These researchers also found that the addition of visual stimulation (such as increased colour or design) not only improved the academic performance of children with ADHD but also reduced their off-task behaviours.

Other stimulus control procedures recommended for improving attention and increasing productivity include the following, which have been adapted from Brock, Jimerson and Hansen (2009); DuPaul, Gormley and Laracy (2014); DuPaul and Stoner (2003); Lee and Zentall (2002); Pfiffner, Barkley and DuPaul (2006); Power, Tresco and Cassano (2009); and Robinson and Skinner (2002):

- Reducing the length of tasks
- Breaking tasks into small steps
- Highlighting what the child needs to complete within a short time span
- Providing explicit instruction and several examples
- Assessing the child's understanding throughout the lesson
- Encouraging active participation and engagement in learning
- Providing clear instructions for transitions
- Using multimodal methods to teach new material
- Providing breaks throughout the day
- Providing the child with direct instruction rather than independent seatwork activities
- Providing instruction in the morning
- Interspersing nonpreferred activities with preferred activities
- Providing structure and predictability using a daily schedule
- Breaking multistep instructions into short, specific and direct instructions
- Repeating instructions as needed
- Giving the child the opportunity to be actively involved in lectures, such as having him or her write important points on the board for the class

- Matching academic tasks to the child's instructional level
- Assigning novel, interesting tasks that allow for active motor participation
- Having the child establish goals for work completion, and reinforcing work completion (focus on process versus product)

In sum, the literature supports the use of academic interventions to promote school success for children with ADHD. Researchers have concluded that the most effective academic interventions are those that

- require active engagement in academic tasks (for example, peer tutoring rather than just listening to the teacher lecture),
- provide relevant stimulation while reducing irrelevant stimuli,
- provide a choice of tasks to complete,
- provide immediate feedback regarding the child's performance,
- chunk work into smaller subunits,
- provide one-to-one instruction and
- individualize to fit the specific needs of the child (Raggi and Chronis 2006).

Furthermore, the use of multiple mediators, such as the inclusion of peer tutoring and computer programs, in the academic intervention plan helps to maintain consistency and adherence to the plan by reducing pressure on the teacher (DuPaul, Weyandt and Janusis 2011).

CONCLUSION

Children diagnosed with ADHD present with significant impairments in the school setting. Therefore, school-based interventions are an essential part of a comprehensive intervention plan for managing the symptoms associated with ADHD. Numerous studies have demonstrated the effectiveness of school-based interventions, and they are recommended as the "first-line treatment for children with ADHD" (DuPaul, Eckert and Vilardo 2012, 406).

Teachers can ensure the effectiveness of these interventions by doing the following (Andrews and Istvanffy 2012; Andrews and Lupart 2000):

- Always view the child as a child with ADHD rather than as an ADHD child.
- Keep in mind that children with ADHD have personal strengths, along with their impairments,

which is the foundation for success with any applied intervention.

- Provide meaningful, well-structured and appealing materials and activities that capture the interest of children.
- Promote positive self-identity and children's active involvement in their learning.

REFERENCES

American Psychiatric Association (APA). 2013. *Diagnostic and Statistical Manual of Mental Disorders.* 5th ed. Washington, DC: APA.

Andrews, J J W, and P Istvanffy. 2012. *Exceptional Life Journeys: Stories of Childhood Disorder.* London: Elsevier.

Andrews, J, and J Lupart. 2000. *The Inclusive Classroom: Educating Exceptional Children.* 2nd ed. Toronto: Nelson Thomson Learning.

Barkley, R A. 2005. *ADHD and the Nature of Self-Control.* New York: Guilford.

———, ed. 2015. *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment.* 4th ed. New York: Guilford.

Brock, S E, S R Jimerson and R L Hansen. 2009. *Identifying, Assessing, and Treating ADHD at School.* New York: Springer.

Canadian Attention Deficit Hyperactivity Disorder Resource Alliance (CADDRA). 2011. *Canadian ADHD Practice Guidelines.* 3rd ed. Toronto: CADDRA. Also available at www.caddra.ca/pdfs/caddraGuidelines2011.pdf (accessed July 21, 2015).

Chafouleas, S M, T C Riley-Tillman and J L McDougal. 2002. "Good, Bad, or In-Between: How Does the Daily Behavior Report Card Rate?" *Psychology in the Schools* 39, no 2 (March): 157–69.

Chafouleas, S M, T C Riley-Tillman and K A Sassu. 2006. "Acceptability and Reported Use of Daily Behavior Report Cards Among Teachers." *Journal of Positive Behavior Interventions* 8, no 3 (July): 174–82.

Clarfield, J, and G Stoner. 2005. "The Effects of Computerized Reading Instruction on the Academic Performance of Students Identified with ADHD." *School Psychology Review* 34, no 2: 246–54.

Dunlap, G, M dePerczel, S Clarke, D Wilson, S Wright, R White and A Gomez. 1994. "Choice Making to Promote Adaptive Behavior for Students with Emotional and Behavioral Challenges." *Journal of Applied Behavior Analysis* 27, no 3 (Fall): 505–18.

DuPaul, G J. 2007. "School-Based Interventions for Students with Attention Deficit Hyperactivity Disorder: Current Status and Future Directions." *School Psychology Review* 36, no 2: 183–94.

DuPaul, G J, T L Eckert and B Vilardo. 2012. "The Effects of School-Based Interventions for Attention Deficit Hyperactivity Disorder: A Meta-Analysis 1996–2010." *School Psychology Review* 41, no 4: 387–412.

DuPaul, G J, R A Ervin, C L Hook and K E McGoey. 1998. "Peer Tutoring for Children with Attention Deficit Hyperactivity Disorder: Effects on Classroom Behavior and Academic Performance." *Journal of Applied Behavior Analysis* 31, no 4 (Winter): 579–92.

DuPaul, G J, M J Gormley and S D Laracy. 2014. "School-Based Interventions for Elementary School Students with ADHD." *Child and Adolescent Psychiatric Clinics of North America* 23, no 4 (October): 687–97.

DuPaul, G J, D C Guevremont and R A Barkley. 1992. "Behavioral Treatment of Attention-Deficit Hyperactivity Disorder in the Classroom: The Use of the Attention Training System." *Behavior Modification* 16, no 2 (April): 204–25.

DuPaul, G J, and G Stoner. 2003. *ADHD in the Schools: Assessment and Intervention Strategies.* 2nd ed. New York: Guilford.

DuPaul, G J, and L L Weyandt. 2006. "School Based Intervention for Children with Attention Deficit Hyperactivity Disorder: Effects on Academic, Social, and Behavioural Functioning." *International Journal of Disability, Development and Education* 53, no 2: 161–76.

DuPaul, G J, L L Weyandt and G M Janusis. 2011. "ADHD in the Classroom: Effective Intervention Strategies." *Theory into Practice* 50, no 1: 35–42.

Evans, S W, J S Owens and N Bunford. 2014. "Evidence-Based Psychosocial Treatments for Children and Adolescents with Attention-Deficit/Hyperactivity Disorder." *Journal of Clinical Child and Adolescent Psychology* 43, no 4: 527–51.

Fisher, W W, C C Piazza and H S Roane. 2011. *Handbook of Applied Behavior Analysis.* New York: Guilford.

Frazier, T W, E A Youngstrom, J J Glutting and M W Watkins. 2007. "ADHD and Achievement: Meta-Analysis of the Child, Adolescent, and Adult Literatures and a Concomitant Study with College Students." *Journal of Learning Disabilities* 40, no 1 (January/February): 49–65.

Girio, E L, and J S Owens. 2009. "Teacher Acceptability of Evidence-Based and Promising Treatments for Children with Attention-Deficit/Hyperactivity Disorder." *School Mental Health* 1, no 1 (March): 16–25.

Lee, D L, and S S Zentall. 2002. "The Effects of Visual Stimulation on the Mathematics Performance of Children with Attention Deficit/Hyperactivity Disorder." *Behavioral Disorders* 27, no 3 (May): 272–88.

Loe, I M, and H M Feldman. 2007. "Academic and Educational Outcomes of Children with ADHD." *Journal of Pediatric Psychology* 32, no 6 (July): 643–54.

Mautone, J A, G J DuPaul and A K Jitendra. 2005. "The Effects of Computer-Assisted Instruction on the Mathematics Performance and Classroom Behavior of Children with ADHD." *Journal of Attention Disorders* 9, no 1 (August): 301–12.

McConaughy, S H, R J Volpe, K M Antshel, M Gordon and R B Eiraldi. 2011. "Academic and Social Impairments of Elementary School Children with Attention Deficit Hyperactivity Disorder." *School Psychology Review* 40, no 2: 200–25.

Murray, D W, D Rabiner, A Schulte and K Newitt. 2008. "Feasibility and Integrity of a Parent–Teacher Consultation Intervention for ADHD Students." *Child and Youth Care Forum* 37, no 3 (June): 111–26.

Pfiffner, L J, R A Barkley and G J DuPaul. 2006. "Treatment of ADHD in School Settings." In *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment,* 3rd ed, ed R A Barkley, 547–89. New York: Guilford.

Power, T J, K E Tresco and M C Cassano. 2009. "School-Based Interventions for Students with Attention-Deficit/Hyperactivity Disorder." *Current Psychiatry Reports* 11, no 5: 407–14.

Raggi, V L, and A M Chronis. 2006. "Interventions to Address the Academic Impairment of Children and Adolescents with ADHD." *Clinical Child and Family Psychology Review* 9, no 2 (June): 85–111.

Reid, R, A L Trout and M Schartz. 2005. "Self-Regulation Interventions for Children with Attention Deficit/Hyperactivity Disorder." *Exceptional Children* 71, no 4 (Summer): 361–77.

Robinson, P W, T J Newby and S L Ganzell. 1981. "A Token System for a Class of Underachieving Hyperactive Children." *Journal of Applied Behavior Analysis* 14, no 3 (Fall): 307–15.

Robinson, S L, and C H Skinner. 2002. "Interspersing Additional Easier Items to Enhance Mathematics Performance on Subtests Requiring Different Task Demands." *School Psychology Quarterly* 17, no 2 (Summer): 191–205.

Shaw, R, and V Lewis. 2005. "The Impact of Computer-Mediated and Traditional Academic Task Presentation on the Performance and Behaviour of Children with ADHD." *Journal of Research in Special Educational Needs* 5, no 2 (June): 47–54.

Smith, B H, R A Barkley and C J Shapiro. 2006. "Attention-Deficit/Hyperactivity Disorder." In *Treatment of Childhood Disorders,* 3rd ed, ed E J Mash and R A Barkley, 65–136. New York: Guilford.

Unnever, J D, and D G Cornell. 2003. "Bullying, Self-Control, and ADHD." *Journal of Interpersonal Violence* 18, no 2 (February): 129–47.

Vile Junod, R E, G J DuPaul, A K Jitendra, R J Volpe and K S Cleary. 2006. "Classroom Observations of Students With and Without ADHD: Differences Across Types of Engagement." *Journal of School Psychology* 44, no 2 (April): 87–104.

Supporting Students with Anxiety in Schools

Maisha M Syeda, University of Calgary

Jac J W Andrews, University of Calgary

Research suggests that anxiety is a common mental health concern for school-aged children (Chavira et al 2004; Rapee, Schniering and Hudson 2009). In Canada, about 10 per cent of children have clinical levels of anxiety (Willms 2002). Clinical anxiety (that is, anxiety disorder) is characterized by the display of excessive levels of fear and worry, physical complaints, and avoidant behaviours in relation to various situations (Carthy et al 2010).

Anxiety can impair children's school functioning with respect to school attendance, peer relationships (Coplan et al 2007) and academic performance. Typically, anxious children and youth receive considerably less attention in the classroom than children and youth who act out (Tomb and Hunter 2004). As a result, they may be referred less frequently for more-formal assessment and support. In any event, many anxious children and youth experience considerable emotional distress that interferes with their school functioning; therefore, there is a need for teachers to have information, resources and training to support the students in their classrooms who are struggling with anxiety.

In this article, we provide examples of empirically supported classroom-based approaches and strategies and schoolwide interventions for teachers who have students struggling with anxiety. We first provide an overview of childhood anxiety, followed by information about the school-related impairments students with anxiety often experience. We conclude with some general and practical suggestions for implementing the approaches, strategies and interventions.

AN OVERVIEW OF CHILDHOOD ANXIETY

Transient fears and anxieties are considered to be part of typical child development; however, for children and youth with an anxiety disorder, the fear and anxiety are excessive or persistent beyond what is considered developmentally normal (Muris et al 2000). Their normative fears and anxieties manifest into a disorder when they persist for a significant period of time, trigger behavioural disturbances and begin to interfere with their day-to-day functioning (American Psychiatric Association [APA] 2013). Most often, the anxiety is accompanied by a physiological arousal and inordinate attention to a perceived threat, which impairs one's ability to adequately participate and function in day-to-day tasks and activities. Currently, the DSM-5 (APA 2013) categorizes anxiety disorders with respect to the following categories: separation anxiety disorder, generalized anxiety disorder, social anxiety disorder, specific phobia and panic disorder. Table 1 provides descriptions of these categorical disorders.

Anxiety disorders can lead to significant distress for children, youth and their families. In the short run, children and youth with anxiety might experience psychosocial impairments (such as low self-esteem and poor peer relationships) and academic and vocational difficulties (such as limited participation in extracurricular activities and difficulty seeking and obtaining employment opportunities [Last, Hansen and Franco 1997]). In the long run, their anxiety can put them at increased risk for developing substance abuse and dependence, mood disorder, and other related psychiatric disorders (Woodward and Fergusson 2001). Overall, research has associated untreated anxiety disorder with severe impairments in life functioning, in the areas of physical health, interpersonal relationships, education and employment (Albano, Chorpita and Barlow 2003). While the prognosis of childhood anxiety depends on various individual and psychosocial factors (such as genetics and temperament), anxiety is likely to cause significant developmental and life-adjustment issues if it remains untreated (Muris and Broeren 2009).

Table 1

Description of Anxiety Disorders

Anxiety Disorder	Description
Separation anxiety disorder	Excessive, age-inappropriate anxiety and fear of separation from home, family or those to whom the child is attached. Such fear is displayed through recurrent distress when separation is anticipated or occurs, leading to avoidance of separation situations and behaviours. Examples include school refusal and refusing to go on field trips without being accompanied by parents.
Generalized anxiety disorder	Excessive anxieties and worries about a number of events and activities (such as future academic performance, being physically attacked, bullies or family finances). Children diagnosed with generalized anxiety disorder also present with somatic symptoms, such as headaches or sleep disturbances.
Social anxiety disorder	Marked and persistent fear of one or more social performance situations in which embarrassment may occur. The situation is then avoided or endured in dread. Examples include fear of doing oral presentations in the classroom, eating in the cafeteria and participating in gym activities.
Specific phobia	Marked by a persistent, stable fear of circumscribed objects or situations in which exposure to those stimuli provokes a distressing, out-of-proportion anxiety response, leading the child to avoid the phobic stimulus. Common specific phobias in children are darkness, loud noises and being injured.
Panic disorder	Marked by recurrent, unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes and involves symptoms such as palpitations, sweating, trembling and chest pain.

HOW CAN ANXIETY IMPAIR SCHOOL FUNCTIONING?

Anxiety can affect students' school functioning in various domains. Impairments related to social functioning and academic achievement are commonly associated with anxiety (Last, Hansen and Franco 1997).

With respect to social functioning, students with anxiety are often rated by their peers as being more socially withdrawn, less likeable and less popular than students who are not anxious (Nelson, Rubin and Fox 2005). It is challenging for students with anxiety to interact with peers and develop sustainable friendships.

Apart from these psychosocial difficulties, the school environment can be particularly stressful and worrisome for students struggling with anxiety. For instance, school-related factors such as tests, grades, homework, parental expectations and parent–school relationships are often significantly associated with students' anxiety (Barrett and Heubeck 2000; Heubeck and O'Sullivan 1998; Langley et al 2004).

It is important to note that particular anxiety disorders can lead to particular school problems. For example, separation anxiety (which is likely to surface in the early years of schooling) involves distressful feelings as a result of being separated from home and caregivers and may lead to school disengagement. Students struggling with generalized anxiety can be troubled by concerns about academic performance, which can result in lower participation in school-related activities (Jarrett et al 2015). Further, for students with social anxiety, the school environment can be the source of anxiety because students are expected to respond to questions and do oral presentations, which can be anxiety provoking. These social activities can cause increasing levels of distress, which may lead to avoidant behaviours, including social withdrawal and school absenteeism (Hansen et al 1998).

While not formally recognized by the DSM-5, test anxiety is another form of anxiety that affects many children and youth (Harpell and Andrews 2012, 2013). Test anxiety relates to students' fears and worries, as well as their sense of a lack of control over how they will perform on a given test. This anxiety is often driven by students' past performance on tests (for example, if they have done poorly on a past test, they fear that they will do poorly on any future test), worries that their classmates will be performing better than them on tests and catastrophic thoughts about the consequences of failing the test (Zeidner 1998). These worries and fears with respect to test taking and performance induce considerable levels of worry in students, which can impair their ability to recall information, to use problem-solving skills and to maximize their potential on tests.

In summary, anxiety disorders can lead to various negative outcomes for students, particularly with respect to school functioning. If anxiety remains untreated, these negative outcomes can result in poor academic achievement, early school dropout, and even risky and unsafe behaviours (such as substance abuse and self-harm). Given the prognosis of anxiety and its impact on school functioning, it is important that students receive appropriate support and services to help them adjust and cope better in the school environment.

REDUCING TEST ANXIETY

A number of strategies can be taught to students who experience distress and anxiety with respect to taking tests.

A common technique that has received empirical validation involves instruction that develops students' test-taking skills. Research has shown that students who struggle with test anxiety benefit from developing those skills. For example, improvement in test-taking skills has been shown to enhance students' self-confidence and academic achievement (Carter et al 2005; Faber 2010). Test-taking skills include reading directions carefully, asking teachers to clarify specific questions, reviewing the test before attempting to answer any questions, allocating an appropriate amount of time for each question, and choosing easy questions to answer first. Students should also be given instructions on how to solve specific questions (such as multiple-choice questions or short-answer

questions). Another test-taking strategy that can be particularly helpful for students struggling with test anxiety is called a test dump. The teacher provides students with blank paper before handing out the test. The students then write down all the important information from the lesson on which the test is based. They can then use this paper as a reference sheet when their anxiety makes it difficult for them to retrieve information from their memory.

In addition to test-taking skills and strategies, students should be given effective study skill instruction (Manassis 2012). For example, students can benefit from learning acronyms, acrostics and rhymes to memorize various informational facts. Since test anxiety often interferes with students' ability to recall previously learned information, these memory strategies can aid in the retrieval of information. Moreover, students can benefit from learning how to create study schedules, select a different component of the lesson for each day of studying and choose ideal study places where they won't be easily distracted. Additionally, school psychologists should be consulted to see whether students need specific accommodations, such as extra time for completing tests or the option to write tests in a separate, quiet space to reduce distractions (Manassis 2012).

Other classroom factors need to be considered when supporting students who are struggling with test anxiety. For example, the teacher's attitudes, perceptions and values with regard to tests can affect how students perceive the tests (Becker et al 2014). Therefore, we advise teachers to be cognizant of how they refer to tests, how they talk about tests and their significance, and the way they define success. For example, referring to a test as "a big test" might trigger stress and anxiety in some students.

TEACHING RELAXATION TECHNIQUES

A large body of research demonstrates that relaxation techniques are effective in reducing symptoms of anxiety in youth (Hashim and Zainol 2015; Plantania-Solazzo et al 1992). Given that anxiety is often accompanied by physiological hyperarousal (such as increased heart rate, sweating and blood circulation), relaxation is assumed to regulate how one physically responds to heightening anxiety (Lohaus et al 2001). Managing hyperarousal is

important in enabling one to coordinate and elicit appropriate emotional and behavioural responses to anxiety. Thus, relaxation is deemed to be an effective physiological mechanism for coping with anxiety. In addition to reducing symptoms of anxiety, relaxation exercises have also been shown to enhance test performance (Bradley et al 2010; Gregor 2005) and to reduce aggression and irritability in students in the classroom.

Students with anxiety are likely to benefit from doing relaxation exercises in the classroom to help them better manage the arousals that accompany their anxiety. Examples of relaxation techniques include progressive muscle relaxation (PMR), mindfulness-based meditation, mindful breathing and yoga. Not only do relaxation techniques help students cope with anxiety-provoking situations (for example, writing a test), but daily practice of these techniques is helpful in enhancing students' attention and their ability to regulate their emotions. All of these factors contribute to better management of their anxiety (Schonert-Reichl and Lawlor 2010).

Relaxation exercises can be accessed through CDs, the Internet and various mobile applications. A number of free mobile applications can be used to guide students through various relaxation and breathing exercises. Table 2 provides brief descriptions of selected applications.

Furthermore, scripts for classroom-based relaxation exercises are available online. The AnxietyBC website offers an excellent script for a classroom-based PMR that takes 15–20 minutes.[1]

POSITIVE BEHAVIOURAL SUPPORT APPROACHES

Positive behavioural support approaches, already established in many school systems, can be modified to support students with anxiety.

McIntosh, Ty and Miller (2014) recommend that schoolwide positive behavioural interventions and strategies (SWPBIS) be implemented in schools. SWPBIS is a comprehensive approach aimed at decreasing the likelihood of inappropriate behaviours. Critical features of the approach include defining and teaching schoolwide expectations for social behaviours, providing instructional consequences for problem behaviours, and implementing empirically supported intervention and prevention practices to address specific student needs.

While the use of SWPBIS to address anxiety is a relatively new approach, recent empirical studies show favourable outcomes. Lane et al (2007) showed that a one-year implementation of SWPBIS for high school students experiencing anxiety and related internalizing concerns led to increasing gains in students' grades

Table 2

Mobile Applications for Breathing and Relaxation Exercises

Mobile Application	Brief Description
Stop, Breathe & Think (http://stopbreathethink.org)	A step-by-step mindfulness meditation curriculum for diverse age groups that guides participants through a variety of mindfulness activities, personal reflection and group discussion
Take a Break! (https://itunes.apple.com/ca/app/take-break!-guided-meditations/id453857236?mt=8)	A variety of guided meditations for stress relief, worry, and anxiety and mood management; recommended for adolescents
Smiling Mind (http://smilingmind.com.au)	Step-by-step mindfulness meditation activities for diverse age groups
Headspace (www.headspace.com)	A variety of personalized meditation exercises

and decreased suspensions. A study by Cheney et al (2009) targeted SWPBIS intervention for adolescents struggling with anxiety and related internalizing disorders. Following the two-year implementation of the program, students' anxiety and mood issues were reduced significantly.

Creating a Safe and Predictable School Climate

A primary aim of SWPBIS is to change the school climate to better support student behaviour. In line with that, some antecedent-based strategies may be incorporated at first to eliminate or reduce threatening stimuli in the school environment that may trigger anxious thoughts or fear in students (McIntosh, Ty and Miller 2014).

Each school has its own culture, climate and expectations. When a school lacks clear and consistent behavioural expectations and guidelines, that can create increased chaos and problem behaviours and interrupt students' learning (Cornell and Mayer 2010). These school disturbances can further elevate students' anxiety, as they are likely to pull students' attention toward threat-relevant stimuli more frequently and increase students' negative affectivity (Roeser, Eccles and Sameroff 2000).

Alternatively, when anxious students perceive the school environment as being safe and orderly, and as having equitable discipline, they are better able to regulate their emotions and engage in learning.

In line with this, SWPBIS can be used to instruct students on school expectations, acceptable social behaviours and the consequences of not following those behaviours (McIntosh, Ty and Miller 2014). Creating a clear understanding of school and classroom expectations and the consequences of inappropriate behaviour can help make the educational environment more predictable for students, as well as serve as a protective factor for students struggling with anxiety.

In addition, students with anxiety benefit from having consistent and predictable classroom and school schedules, which can be implemented through SWPBIS. Strategies for creating a more predictable classroom environment include having clear daily schedules, having clear deadlines for academic tasks, and having checklists or other visual reminders for upcoming school events (such as tests and field trips) (Manassis 2012).

Teaching Effective Coping Responses

The instructional feature of SWPBIS can be used for developing adaptive social and emotional skills for addressing threat-relevant stimuli (for example, social problem-solving skills and emotional regulation strategies) (McIntosh, Ty and Miller 2014). The provision and development of these adaptive social and emotional skills can be incorporated in the educational curriculum (such as in health lessons), and mental health professionals (such as social workers, school psychologists and counsellors) can be consulted for help with modifying the curriculum to include instruction on social and emotional functioning. Ultimately, the instruction and practice of adaptive social and emotional skills can provide students with ways to replace their existing, ineffective coping strategies (such as peer avoidance) with effective coping behaviours, as well as challenge their negative thoughts (such as catastrophic thinking), which can escalate their anxious thoughts, fears and avoidance (Akin-Little et al 2009).

Particularly at the elementary and middle school levels, students can benefit from using coping cards. Coping cards provide helpful thoughts for students who are trying to cope with anxiety. The following are examples of helpful thoughts:

- "That's just Mr Worry trying to bully me! I don't need to listen!"
- "I'm feeling anxiety right now. I can do some calm breathing to feel better."
- "I will be OK. It is just my anxiety talking."
- "I can handle being alone. I've done it before."
- "What is the best thing that could end up happening?"

Furthermore, coping cards can be used to teach students how to practise positive self-talk. Positive self-talk aims to empower students in their ability to deal with their stressors and cope with their fears, worries and irrational thoughts. In fact, the practice of positive self-talk is an important component of cognitive behavioural therapy (Beidas et al 2010), which is deemed to be one of the most effective interventions for treating childhood anxiety (Reynolds et al 2012). Examples of positive self-talk statements include the following:

- "All I have to do is try this activity."
- "As long as I can give my 100 per cent."
- "I will be fine. I have done it before."
- "I can do this!"

SCHOOLWIDE ANXIETY PREVENTION AND INTERVENTION PROGRAMS

The past decade has seen an increase in school-based interventions to treat anxiety and related mental health concerns (Ginsburg et al 2008). Given that school settings include children of various cultural and socioeconomic backgrounds, systematic delivery of mental health interventions allows front-line service providers to provide early identification, prevention and intervention to children who otherwise might go without such treatment (Weist and Evans 2005). In addition, providing services in the school setting reduces concerns about accessibility, transportation and scheduling, which are often obstacles for those seeking services (Thompson and Trice-Black 2012).

School-based cognitive behavioural therapy (CBT) and social and emotional learning (SEL) are two of the most effective and complementary intervention approaches in school settings (Miller, Shumka and Baker 2012). Both approaches follow manualized curricula that are developmentally appropriate for students and are based on validated psychological theories. These approaches challenge the maladaptive cognitive thoughts that usually form the basis of students' irrational fears and anxieties, and develop their ability to use more effective behaviours through repeated practice, role modelling and exposure.

While students with diagnosed anxiety disorders may be referred to these treatment programs outside the classroom and school, many of the strategies incorporated in these approaches can be implemented in the classroom to prevent or reduce anxiety problems. In fact, classroom prevention programs provide an ideal opportunity for children to acquire the socioemotional skills that can help them cope with their day-to-say stressors and also serve as a protective factor for students at risk of developing anxiety disorders. For example, Friends for Life is an elementary-level anxiety prevention program that has been shown to reduce anxious symptoms in students in the classroom setting, results that were sustained at the one-year follow-up (Barrett, Lock and Farrell 2005; Bernstein et al 2008). Moreover, it is a prevention program approved by the ministries of education in Ontario and British Columbia (Barrett et al 2006). Strong Kids is another classroom-based prevention program in which students learn how to identify emotions, develop adaptive thinking and reasoning styles, set goals, problem solve, and practise relaxation and stress-management techniques (Merrell and Gueldner 2010).

Despite the advancement of evidence-based interventions, a significant number of students who struggle with anxiety do not receive adequate support because of cost issues, time constraints, and lack of access to programs and approaches. Hence, intervention strategies that can be incorporated into the educational curriculum can play an integral role in helping students to de-escalate their worries and fear and to cope better with their anxieties.

PRACTICAL CONSIDERATIONS

Before teachers and other professionals design and incorporate specific strategies and interventions to support students with anxiety, they must have an adequate understanding of a student's specific needs and concerns. Given the diverse nature of anxiety disorders and the fact that each student experiences anxiety in his or her own way, school professionals working with students should be well informed about students' specific stressors, the nature of their distress and their related needs. We recommend that students who have a diagnosed anxiety disorder have their own individualized programming plans, whereby the student, the parents and the teachers can agree on coping strategies the student can follow when faced with anxiety-provoking situations in and out of school.

If a school decides to implement a mental-health-based prevention program in its educational curriculum, teachers should be provided with adequate support, training and resources. For example, consultation and collaboration with mental health professionals (such as school psychologists and counsellors) should be provided when planning and implementing the program.

CONCLUSION

Anxiety is one of the most common mental health concerns in today's classrooms. Students diagnosed with anxiety may experience impairments in various domains of school functioning; thus, they should be supported through appropriate strategies and interventions to better meet their needs. While untreated anxiety may lead to a number of adverse outcomes, schools are a suitable place in which children and adolescents can be exposed to and taught a number of strategies to better deal with their anxiety.

NOTE

1. See www.anxietybc.com/sites/default/files/MuscleRelaxation_0.pdf (accessed September 14, 2015).

REFERENCES

Akin-Little, A, S G Little, M A Bray and T J Kehle, eds. 2009. *Behavioral Interventions in Schools: Evidence-Based Positive Strategies.* Washington, DC: American Psychological Association.

Albano, A M, B F Chorpita and D H Barlow. 2003. "Childhood Anxiety Disorders." In *Child Psychopathology,* 2nd ed, ed E J Mash and R A Barkley, 279–329. New York: Guilford.

American Psychiatric Association (APA). 2013. *Diagnostic and Statistical Manual of Mental Disorders.* 5th ed. Washington, DC: APA.

Barrett, P M, L J Farrell, T H Ollendick and M Dadds. 2006. "Long-Term Outcomes of an Australian Universal Prevention Trial of Anxiety and Depression Symptoms in Children and Youth: An Evaluation of the Friends Program." *Journal of Clinical Child and Adolescent Psychology* 35, no 3: 403–11.

Barrett, P M, S Lock and L J Farrell. 2005. "Developmental Differences in Universal Preventive Intervention for Child Anxiety." *Clinical Child Psychology and Psychiatry* 10, no 4 (October): 539–55.

Barrett, S, and B G Heubeck. 2000. "Relationships Between School Hassles and Uplifts and Anxiety and Conduct Problems in Grades 3 and 4." *Journal of Applied Developmental Psychology* 21, no 5 (September–October): 537–54.

Becker, E S, T Goetz, V Morger and J Ranellucci. 2014. "The Importance of Teachers' Emotions and Instructional Behavior for Their Students' Emotions: An Experience Sampling Analysis." *Teaching and Teacher Education* 43 (October): 15–26.

Beidas, R S, C L Benjamin, C M Puleo, J M Edmunds and P C Kendall. 2010. "Flexible Applications of the Coping Cat Program for Anxious Youth." *Cognitive and Behavioral Practice* 17, no 2 (May): 142–53.

Bernstein, G A, D H Bernat, A M Victor and A E Layne. 2008. "School-Based Interventions for Anxious Children: 3-, 6-, and 12-Month Follow-Ups." *Journal of the American Academy of Child and Adolescent Psychiatry* 47, no 9 (September): 1039–47.

Bradley, R T, R McCraty, M Atkinson, D Tomasino, A Daugherty and L Arguelles. 2010. "Emotion Self-Regulation, Psychophysiological Coherence, and Test Anxiety: Results from an Experiment Using Electrophysiological Measures." *Applied Psychophysiology and Biofeedback* 35, no 4 (December): 261–83.

Carter, E W, J Wehby, C Hughes, S M Johnson, D R Plank, S M Barton-Arwood and L B Lunsford. 2005. "Preparing Adolescents with High-Incidence Disabilities for High-Stakes Testing with Strategy Instruction." *Preventing School Failure* 49, no 2: 55–62.

Carthy, T, N Horesh, A Apter, M D Edge and J J Gross. 2010. "Emotional Reactivity and Cognitive Regulation in Anxious Children." *Behaviour Research and Therapy* 48, no 5 (May): 384–93.

Chavira, D A, M B Stein, K Bailey and M T Stein. 2004. "Child Anxiety in Primary Care: Prevalent but Untreated." *Depression and Anxiety* 20, no 4: 155–64.

Cheney, D A, S A Stage, L S Hawken, L Lynass, C Mielenz and M Waugh. 2009. "A 2-Year Outcome Study of the Check, Connect, and Expect Intervention for Students at Risk for Severe Behavior Problems." *Journal of Emotional and Behavioral Disorders* 17, no 4 (December): 226–43.

Coplan, R J, A Girardi, L C Findlay and S L Frohlick. 2007. "Understanding Solitude: Young Children's Attitudes and Responses Toward Hypothetical Socially Withdrawn Peers." *Social Development* 16, no 3 (August): 390–409.

Cornell, D G, and M J Mayer. 2010. "Why Do School Order and Safety Matter?" *Educational Researcher* 39, no 1 (January/February): 7–15.

Faber, G. 2010. "Enhancing Orthographic Competencies and Reducing Domain-Specific Test Anxiety: The Systematic Use of Algorithmic and Self-Instructional Task Formats in Remedial Spelling Training." *International Journal of Special Education* 25, no 2: 78–88.

Ginsburg, G S, K D Becker, J N Kingery and T Nichols. 2008. "Transporting CBT for Childhood Anxiety Disorders into Inner-City School-Based Mental Health Clinics." *Cognitive and Behavioral Practice* 15, no 2 (May): 148–58.

Gregor, A. 2005. "Examination Anxiety: Live with It, Control It or Make It Work for You?" *School Psychology International* 26, no 5 (December): 617–35.

Hansen, C, S L Sanders, S Massaro and C G Last. 1998. "Predictors of Severity of Absenteeism in Children with Anxiety-Based School Refusal." *Journal of Clinical Child Psychology* 27, no 3: 246–54.

Harpell, J V, and J J W Andrews. 2012. "Multi-Informant Test Anxiety Assessment of Adolescents." *Psychology* 3, no 7 (July): 518–24.

———. 2013. "Relationship Between School Based Stress and Test Anxiety." *International Journal of Psychological Studies* 5, no 2: 74–84.

Hashim, H A, and N A Zainol. 2015. "Changes in Emotional Distress, Short Term Memory, and Sustained Attention Following 6 and 12 Sessions of Progressive Muscle Relaxation in 10–11 Years Old Primary School Children." *Psychology, Health and Medicine* 20, no 5: 623–28.

Heubeck, B, and C O'Sullivan. 1998. "An Exploration into the Nature, Frequency and Impact of School Hassles in the Middle School Years." *Australian Psychologist* 33, no 2 (July): 130–37.

Jarrett, M A, A K Black, H F Rapport, A E Grills-Taquechel and T H Ollendick. 2015. "Generalized Anxiety Disorder in Younger and Older Children: Implications for Learning and School Functioning." *Journal of Child and Family Studies* 24, no 4 (April): 992–1003.

Lane, K L, J H Wehby, E J Robertson and L A Rogers. 2007. "How Do Different Types of High School Students Respond to Schoolwide Positive Behavior Support Programs? Characteristics and Responsiveness of Teacher-Identified Students." *Journal of Emotional and Behavioral Disorders* 15, no 1 (Spring): 3–20.

Langley, A K, R L Bergman, J McCracken and J C Piacentini. 2004. "Impairment in Childhood Anxiety Disorders: Preliminary Examination of the Child Anxiety Impact Scale–Parent Version." *Journal of Child and Adolescent Psychopharmacology* 14, no 1 (March): 105–14.

Last, C G, C Hansen and N Franco. 1997. "Anxious Children in Adulthood: A Prospective Study of Adjustment." *Journal of the American Academy of Child and Adolescent Psychiatry* 36, no 5 (May): 645–52.

Lohaus, A, J Klein-Hebling, C Vogele and C Kuhn-Hennighausen. 2001. "Psychophysiological Effects of Relaxation Training in Children." *British Journal of Health Psychology* 6, no 2 (May): 197–206.

Manassis, K. 2012. "Generalized Anxiety Disorder in the Classroom." *Child and Adolescent Psychiatric Clinics of North America* 21, no 1 (January): 93–103.

McIntosh, K, S V Ty and L D Miller. 2014. "Effects of School-Wide Positive Behavioral Interventions and Supports on Internalizing Problems: Current Evidence and Future Directions." *Journal of Positive Behavior Interventions* 16, no 4 (October): 209–18.

Merrell, K W, and B A Gueldner. 2010. "Preventative Interventions for Students with Internalizing Disorders: Effective Strategies for Promoting Mental Health in Schools." In *Interventions for Achievement and Behavior in a Three-Tier Model Including RTI,* 3rd ed, ed M R Shinn and H M Walker, 729–823. Bethesda, Md: National Association of School Psychologists.

Miller, L D, E Shumka and H Baker. 2012. "Special Applications: A Review of Cognitive Behavioral Mental Health Interventions for Children in Clinical and School-Based Settings." In *Cognitive Behavioral Therapy: Applications, Methods and Outcomes,* ed S A Lee and D M Edget, 1–36. Hauppauge, NY: Nova Science.

Muris, P, and S Broeren. 2009. "Twenty-Five Years of Research on Childhood Anxiety Disorders: Publication Trends Between 1982 and 2006 and a Selective Review of the Literature." *Journal of Child and Family Studies* 18, no 4 (August): 388–95.

Muris, P, H Merckelbach, B Mayer and E Prins. 2000. "How Serious Are Common Childhood Fears?" *Behaviour Research and Therapy* 38, no 3 (March): 217–28.

Nelson, L J, K H Rubin and N A Fox. 2005. "Social Withdrawal, Observed Peer Acceptance, and the Development of Self-Perceptions in Children Ages 4 to 7 Years." *Early Childhood Research Quarterly* 20, no 2: 185–200.

Plantania-Solazzo, A, T M Field, J Blank, F Seligman, C Kuhn, S Schanberg and P Saab. 1992. "Relaxation Therapy Reduces Anxiety in Child and Adolescent Psychiatric Patients." *Acta Paedopsychiatrica* 55, no 2: 115–20.

Rapee, R M, C A Schniering and J L Hudson. 2009. "Anxiety Disorders During Childhood and Adolescence: Origins and Treatment." *Annual Review of Clinical Psychology* 5: 311–41.

Reynolds, S, C Wilson, J Austin and L Hooper. 2012. "Effects of Psychotherapy for Anxiety in Children and Adolescents: A Meta-Analytic Review." *Clinical Psychology Review* 32, no 4 (June): 251–62.

Roeser, R W, J S Eccles and A J Sameroff. 2000. "School as a Context of Early Adolescents' Academic and Social-Emotional Development: A Summary of Research Findings." *The Elementary School Journal* 100, no 5 (May): 443–71.

Schonert-Reichl, K A, and M S Lawlor. 2010. "The Effects of a Mindfulness-Based Education Program on Pre- and Early Adolescents' Well-Being and Social and Emotional Competence." *Mindfulness* 1, no 3 (September): 137–51.

Thompson, E H, and S Trice-Black. 2012. "School-Based Group Interventions for Children Exposed to Domestic Violence." *Journal of Family Violence* 27, no 3 (April): 233–41.

Tomb, M, and L Hunter. 2004. "Prevention of Anxiety in Children and Adolescents in a School Setting: The Role of School-Based Practitioners." *Children and Schools* 26, no 2 (April): 87–101.

Weist, M D, and S W Evans. 2005. "Expanded School Mental Health: Challenges and Opportunities in an Emerging Field." *Journal of Youth and Adolescence* 34, no 1 (February): 3–6.

Willms, J D. 2002. "The Prevalence of Vulnerable Children." In *Vulnerable Children: Findings from Canada's National Longitudinal Survey of Children and Youth,* ed J D Willms, 45–70. Edmonton, Alta: University of Alberta Press.

Woodward, L J, and D M Fergusson. 2001. "Life Course Outcomes of Young People with Anxiety Disorders in Adolescence." *Journal of the American Academy of Child and Adolescent Psychiatry* 40, no 9 (September): 1086–93.

Zeidner, M. 1998. *Test Anxiety: The State of the Art.* New York: Plenum.

Diversity Education: Understanding and Addressing Student Diversity

edited by Jac J W Andrews and Judy Lupart
Nelson Education, 2015

Felecia Hoey, University of Calgary

Caroline Buzanko, University of Calgary

Serena Seeger, University of Calgary

Today's educators must address the diversity of students in their classrooms. This poses many challenges with respect to the preparation of teachers in faculties of education. Preservice teachers benefit from relevant and useful resources related to the pedagogy and practice of diversity education. These resources should provide contemporary, innovative, strategic and accountable information that can be used to address the differences in ability, culture, family, gender, language and religion—as well as developmental, behavioural and psychological differences—among students in all grades.

Diversity Education: Understanding and Addressing Student Diversity, edited by Jac J W Andrews and Judy Lupart, is one such resource. It provides a comprehensive overview of empirically based concepts and practical instructional approaches

" [The book] provides a comprehensive overview of empirically based concepts and practical instructional approaches that will enhance educators' knowledge and abilities in addressing the needs of diverse learners. **"**

that will enhance educators' knowledge and abilities in addressing the needs of diverse learners. The book integrates current information from both empirical and theoretical perspectives. Therefore, it is an excellent resource for preservice and inservice teachers, as well as for allied educational professionals.

Throughout the book are a number of useful features. The book comprises an introductory thematic preview, 19 chapters categorized into three overarching themes and an appendix. To introduce each theme, the editors provide a note that orients the reader to the main focus of the subsequent chapters. Each chapter opens with a graphic organizer that serves as a clear overview of the content to be examined. Key terms are bolded in the text and defined in the margins, as well as in the glossary at the end of the book. The Research into Practice boxes summarize relevant research and the implications for practice in the classroom. The Try This One boxes provide practical strategies for teachers to use in the classroom, and the Diverse Voices boxes share the viewpoints of students, parents, teachers and school administrators. Case studies serve as examples of how

the ideas discussed can be practically applied in the classroom. Each chapter ends with a Reflections, Questions, and Resources section that includes the author's reflection on the chapter, questions to consider and a list of resources for further exploration.

The book's introduction is a well-organized preview of the major themes. Each theme is summarized, and theoretical perspectives and practical applications are discussed. The introduction closes with a discussion of the complexities that arise in the face of diversity in an educational setting.

The first four chapters of the book fall into the theme Setting the Context for Student Diversity. This theme focuses on the foundations and principles of student diversity, learning perspectives in the 21st century, social and political issues, and teaching in relation to student diversity.

Chapter 1 describes the evolution of diversity education and examines its principles, while bridging the theory–practice gap with practical applications.

Chapter 2 offers practical examples of how to transform classrooms to meet the needs of 21st-century students in ways that will promote their success in a context of changing technology.

While highlighting the rapidly changing demographic landscape of Canada, Chapter 3 reviews the social and political issues related to student diversity and inclusivity in Canadian classrooms. Research and case studies are presented to unpack the complexity and the barriers to addressing student diversity, and examples are provided to show how to promote diversity and create environments that encourage students to explore their own identities and learning needs.

Finally, Chapter 4 emphasizes the need to develop learning activities suitable for all learning styles. The authors offer empirically supported instructional practices for creating a person–environment fit. Their framework provides a picture of what classrooms should look like and offers practical solutions that educators can use to independently create those classrooms.

Overall, Theme 1 clearly delineates the paradigm shift that has occurred in Canada's education system over the last three decades and lays a foundational framework for promoting student diversity in Canadian classrooms. Readers are provided with in-depth content pertaining to student diversity, along with practical materials that educators can implement

to honour student diversity while fostering resilient, successful learners.

The second theme, Creating Schools That Support Student Diversity, consists of five chapters that focus on educational leadership and school organization; teacher education and professional development; educational assessment; program planning; and consultation, collaboration among professionals and community partnership. Together, these chapters examine how student diversity can effectively be addressed in schools.

Chapter 5 explores ideas related to culture, diversity, discrimination and racism in the school environment. The authors discuss the changes brought about by immigration to Canada and how those changes affect the makeup of classrooms. Ways to include all students in the classroom are provided, along with information on the practicalities of these procedures.

Chapter 6 focuses on the importance of further education and professional development throughout teachers' careers so that they can meet the changing needs of their students. Ways to develop growth plans in order to reach goals and enhance professional practice in the classroom are provided.

Chapter 7 looks at classroom assessment and how assessment can help address student diversity. The purpose of assessment is discussed, with consideration of areas in which assessing students with diverse needs may be challenging.

Chapter 8 presents information for a planning framework that includes a variety of approaches for the inclusion of students with diverse needs. Real-life application strategies in a classroom are presented, allowing the reader to understand the challenges of differentiating instruction.

Last, Chapter 9 focuses on the importance of consultation, collaboration and community partnerships in the school environment.

Overall, Theme 2 adheres to the book's objectives and provides examples of how schools can support student diversity. Each chapter thoroughly discusses both goals and challenges and allows readers to further their knowledge and test their thinking. The authors use the language used by educators, allowing for a true understanding of the models presented. The ways in which the authors present information allow for a clear fidelity of implementation for both preservice and inservice teachers, as well as other professionals.

The third theme, Curriculum and Student Diversity, includes the book's last 10 chapters and looks at diversity in mathematics, language arts, social studies, science and the performing arts at the elementary and secondary levels. These chapters focus on empirically based, practical and innovative ideas for addressing the specific instructional challenges presented by diverse students in each subject area.

Chapters 10 through 14 focus on elementary curricula. Chapter 10 explores language and literacy learning, with a focus on "asset-oriented multiliteracies pedagogy" (p 335), which acknowledges the many forms of literacy and modes of communication available to students. The authors discuss how this approach to teaching can support diverse learners, and they provide a layout for developing literacy programs.

Chapter 11 stresses the importance of developing an inclusive sociocultural perspective that allows students to contribute their unique knowledge to the scientific learning of others.

Chapter 12 looks at the mathematics curriculum and how early experiences in math influence later interest and ability. The authors challenge common myths about mathematics and provide ideas for teaching math in a way that harnesses the power of diversity.

Chapter 13 emphasizes the need for educators to consider the unique identities of their students, while also creating a safe space for meaningful discussions on topics of diversity in the social studies curriculum. The author describes how provinces in Canada have attempted to meet those needs.

Using drama as an example, Chapter 14 discusses the importance of the performing arts, asserting that they provide a context where diverse students learn to communicate with one another and engage in activities that develop their understanding of diversity.

Chapters 15 through 19 address instructional challenges specific to secondary curricula. Chapter 15 discusses how a multiliteracies framework in language and literacy curricula can lead to student collaboration and empowerment. It provides the reader with an outline of a multiliteracies framework, as well as examples of how to implement the framework.

Chapter 16 describes pedagogies that can be implemented to improve science curricula. The author stresses the importance of making science culturally relevant by incorporating students' life experiences into action-based activities.

Chapter 17 insightfully raises important issues regarding the math curriculum and discusses technologies that may be used to engage the diversities of learners in ways that contribute to a richer understanding for all students.

Chapter 18 examines how diversity has been represented in secondary social studies programs. It analyzes how provincial curricula address diversity and discusses methods educators can use to address this diversity in their own classrooms.

Finally, Chapter 19 argues that the performing arts can be used to teach students about diversity, as they allow students to work collaboratively, to develop new ways to communicate and to relate to diverse others.

Each chapter in Theme 3 thoughtfully considers the differences among students in all grades. The inclusive practices discussed meet the learning and developmental needs of individual students, as well as the classroom as a whole. The authors successfully present ways in which diversity can be used to enhance student learning, while providing invaluable program planning and instructional recommendations to stimulate educators' thinking. The feature boxes throughout (for example, Diverse Voices) tie in well with the theoretical models presented and provide examples of how diversity education looks in practice.

The book concludes with an excellent appendix that provides classroom strategies for students with diverse learning needs, including developmental and learning disorders, behavioural exceptionalities, emotional disorders, communication issues and giftedness. The recommendations are a beneficial resource for all professionals working in schools.

Diversity Education: Understanding and Addressing Student Diversity is an excellent resource for those working in the field of education, as it provides current and relevant information on how to address diversity in a way that allows for every student to be successful. This book is an essential resource that delineates what diversity can look like, thereby bridging the gap between theory and practice. It provides suggestions that allow educators to embrace diversity and to enhance teaching practices and student learning. The book also presents the reader with the realities of challenges and clear guidelines for the remediation of such challenges. Undoubtedly, this book is a valuable contribution to the development of our understanding of diversity education, as it outlines how educators can create inclusive classrooms in the 21st century.

GUIDELINES FOR SUBMISSION

The Inclusive Educator Journal is the official journal of the Alberta Teachers' Association (ATA) Council for Inclusive Education. This journal is intended for teachers, administrators and other professionals involved in inclusive education. Its goals are to promote professional development for those working in inclusive learning environments and to provide readers with exemplars of best practices in inclusive education. The main audience for the journal is practising classroom teachers, so articles should have implications and practical applications for the classroom.

We welcome articles related to inclusive education practice from all educators. Our readers welcome

- articles describing promising or innovative practices in the field of inclusion, including implications for the implementation of those practices in classrooms or schools;
- research articles;
- reviews of books and technological applications, and evaluations of inclusive programs or materials;
- literature reviews; and
- articles discussing trends or issues related to inclusive practice.

Please ensure that your article is clear and concise and that it provides enough information so that readers can understand the issues or questions addressed, what was done, and the findings and recommendations.

Articles should be no more than 3,500 words, including illustrations, tables and the reference list. Book reviews should be no more than 2,000 words. Other articles and studies cited should reflect the most current work (within the past 10 years). All illustrations and tables from other sources must be referenced and appropriate releases obtained. Sources cited in the text of the article must appear in full in a reference list at the end of the article.

To ensure blind review, use only the article title in headers in the article. Do not include any identifying information in the document, such as author name, affiliation, biography, contact information, acknowledgements, forthcoming articles or works in progress.

Submit articles by e-mail to the editors. Please include a cover page with the contributor name, professional position, address, phone number and e-mail address. Your cover page should indicate that you are the author and copyright holder.

After an article has been submitted to the editors, it will be forwarded to a team of peer reviewers. The reviewers will evaluate the article in terms of its importance to the journal, the quality of the work and the clarity of the writing. After reading and evaluating the article and the reviews, the editors will e-mail the author with the decision.

Articles, accompanied by the Copyright Transfer Agreement, may be e-mailed to Nancy Grigg at nancy.grigg@uleth.ca and Kelly Huck at kellyhuck@shaw.ca.

Copyright Transfer Agreement

I/We, as author(s), transfer copyright of the article entitled

_____

written by _____

to the Council for Inclusive Education of the Alberta Teachers' Association, in consideration of publication. This transfer shall become effective if and when the article is accepted for publication, thereby granting the Alberta Teachers' Association the right to authorize republication, representation and distribution of the original and derivative material. I/We further certify that the article under consideration has not been previously published and is not being considered by another publisher.

Name (signature of one author is required)	
Date	
Address (including postal code)	
Phone	

Council for Inclusive Education Executive 2015/16

President
Hayley Christen
Bus 403-357-3991
hayley.christen@rdpsd.ab.ca

Secretary
Patricia Schwandt
780-582-7779, ext 273
patriciaschwandt@gpcsd.ca

Treasurer
Shelley Gaalaas
Bus 403-848-2120
shelley.gaalaas@rdcrs.ca

Newsletter Editor
Kelly Huck
Bus 403-932-4457, ext 6822
kellyhuck@shaw.ca

Journal Coeditors
Nancy Grigg
Bus 403-329-2257
nancy.grigg@uleth.ca

Kelly Huck
Bus 403-932-4457, ext 6822
kellyhuck@shaw.ca

Conference 2015 Codirectors
Sheelagh Brown
Bus 780-488-1221
sheelagh.brown@epsb.ca

Carol Knott
Bus 780-417-8191
carol.knott@eips.ca

PD Coordinator
Janis Bekar
janis.bekar@crps.ca

Webmaster
Danece Workman
Bus 403-346-3223
danece.workman@rdpsd.ab.ca

Alberta Education Representative
Joyce Clayton
Bus 780-422-6551
joyce.clayton@gov.ab.ca

University Liaison
Nancy Grigg
Bus 403-329-2257
nancy.grigg@uleth.ca

PEC Liaison
Diane Sellars-Myshchyshyn
diane.sellars@teachers.ab.ca

ATA Staff Advisor
Joni Turville
Bus 780-447-9455 or
1-800-232-7208
joni.turville@ata.ab.ca

Regional Presidents

Calgary
Michelle Dow
Bus 403-777-6380
mmdow@cbe.ab.ca

Canadian Rockies
Myka Breymann
Bus 403-762-4411, ext 7010
myka.breymann@crps.ca

Central Alberta
Judy Windrim
Bus 403-347-1171, ext 1613
judy.windrim@rdpsd.ab.ca

Edmonton
Debbie Bale
Bus 780-462-5496
debbie.bale@epsb.ca

North West
Rhonda Kelly
rhondakelly@gpcsd.ca

South East
Joanne Stockman
Bus 403-528-6725
joanne.stockman@sd76.ab.ca