Facts and fallacies: differentiation and the general education curriculum for students with special educational needs

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As policy makers and educators respond to legislation promoting the inclusion of students with disabilities in general education classrooms, there is sometimes confusion about why this is being done and how it can be accomplished effectively. In this article, two categories of fallacies, or misunderstandings, are identified. The first fallacy is that students with disabilities are incapable of learning the general education curriculum. The second fallacy is that teachers are required to 'cover' the entire curriculum, sometimes at a pace that leaves students with and without disabilities behind. Facts are presented following each fallacy. These facts describe research-based pedagogies effective for students with and without disabilities, indicating that students with mild disabilities can learn the general education curriculum when responsive pedagogies are used. These facts also describe how schools that promote differentiation can potentially achieve higher scores on large-scale assessments than schools that promote 'one size fits all' instruction.

Key words: inclusion, students with disabilities, general education curriculum.

In the United States, two federal laws converge in providing clear messages about the importance of students with special educational needs (i.e., disabilities) participating in school experiences that provide them with the opportunity to learn and master the same content as their typical peers. First, the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 is clear in its language that students with disabilities should progress and participate in the general education curriculum, and that they are included in district and state-wide assessments. Historically, some students with disabilities have been taught different content from their same-age peers and, consequently, experienced minimal exposure to the general education curriculum (Maccini and Gagnon, 2002). Second, the No Child Left Behind (NCLB) Act of 2001 requires states to include students with disabilities in large-scale assessments, aligned with the general education curriculum, used to measure adequate yearly progress. This is both an opportunity and a conundrum that students with disabilities are included in large-scale assessments. It is an opportunity because it promotes actions that provide students with disabilities with access to and accountability for content that their peers receive in the general education curriculum. It is a conundrum because, without instructional changes in the form, focus and delivery of the general education curriculum, students with disabilities who are already behind will stay or get even further behind.

Similar initiatives are occurring in other countries (e.g., Hardman, Smith and Wall, 2005; Lindsay, 2004; Marchesi, Martin, Echeita and Perez, 2005; Skarbrevik, 2005) for ensuring that students with special educational needs receive quality educational experiences (e.g., Every Child Matters in the UK). Moreover, researchers in some countries (e.g., Italy) note that although national policies are in place for integrating more students with disabilities into general education classrooms, there is still a need to conduct more empirical research in general education settings that focuses on how to integrate students with disabilities successfully (Begeny and Martens, 2007). These initiatives, policies and legislations focus on achieving two aims; firstly, students with special educational that needs have educational experiences that focus more on the curriculum taught to students without disabilities; and secondly that students with special educational needs receive more of their educational experiences in the general education setting with their same-age peers. These two actions have implications for teacher preparation personnel in both special and general education programmes to ensure that the professionals are wellprepared for students with and without disabilities who

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are learning the general education curriculum together (Cole, 2005; Romi and Leyser, 2006). Educators may feel unprepared adequately to instruct students with special educational needs, and the educators may perceive that these students should be learning at the same pace as other students in general education classrooms. Moreover, when school-wide assessments occur for students with and without disabilities, educators feel pressure to 'cover the curriculum' and to ensure that all students are exposed to the curriculum, even if that means that some students are not learning the content.

These are pedagogical dilemmas for general and special educators who may be unsure of their roles, what instructional techniques to use, and the extent to which they can vary the pace of 'dispensing' the curriculum. Consequently, educators may experience a cognitive dissonance response, in that they believe they are being told to teach all students together for the same content at the same pace in the same way, but they are also aware that students with and without special educational needs (e.g., students who are at-risk for school failure) are not learning as much as they could or as well as they could if the instructional pace and paths were altered to suit their needs better.

The purpose of this article is to provoke thought and action about how to ensure that more students with and without disabilities can learn and master the content that at times seems to be swiftly passing them by. Two categories of fallacies are described. The first fallacy is that students with disabilities are incapable of learning the general education curriculum. The second fallacy is that teachers are required to cover the entire curriculum, regardless of student learning. Facts are presented following each fallacy in an effort to address misgivings that teachers may have (see Table 1).

 Table 1. Fallacies and facts about increasing assessment scores for students with special educational needs

Fallacy 1: Students with disabilities are incapable of learning the general education curriculum.

Fact:

Students with disabilities *can* learn the general education curriculum. Focus on the 'how.'

- Students with disabilities learn when techniques that promote their learning are used.
- Some students with disabilities need instruction beyond that reasonably available in general education settings.
- Some students with disabilities need instructional focus that is not solely based on large-scale assessment content.

Fallacy 2:

Teachers are required to cover the curriculum, regardless of student learning.

Fact:

Schools that promote differentiation can potentially achieve higher scores on large-scale assessments than schools that promote 'one size fits all' instruction.

- Differentiated techniques are responsive to diverse student needs.
- Differentiated techniques promote active student involvement in learning.

Progress monitoring informs teaching and learning.

Fallacy 1: Students with disabilities are incapable of learning the general education curriculum

Palincsar, Magnusson, Collins and Cutter (2001) found that general educators who used advanced teaching practices within science classes for students with heterogeneous learning needs promoted increased achievement for typical students, low-achievers, and students with learning disabilities. Among the advanced teaching practices used were guided inquiry, group work, monitoring and facilitating student thinking, and recursive opportunities for students to develop and refine investigative processes. Although pre-test scores indicated that students began at different points for instruction, the slope of progress when pre-test scores were compared to post-test scores is impressive. All students made gains. Interestingly, Palincsar et al. commented on access to the general education curriculum by expanding how 'access' is typically interpreted. If 'access' is typically interpreted as exposing students to general education curriculum content, then the interpretation of 'access' needs to expand to include:

- access to instructional context by attending to the environment and dynamics of students working effectively with peers while they learn;
- access to the students' thinking and reasoning processes by conferencing with students about how they are thinking and why they are making specific decisions;
- access to instructional content by designing a variety of presentation and practice opportunities that provide choices for how students receive, practice and learn content;
- access to assessment by accepting multiple methods for students to show what they know.

Maccini, McNaughton and Ruhl (1999), in their synthesis of research on teaching algebra to middle school students with learning disabilities, found that students with learning disabilities are capable of learning algebra skills and concepts. A growing research base is emerging in this area and is instructive for promoting the learning of students with and without disabilities. For example, sets of middle school teachers taught two algebra classes each, but used two different approaches for algebra, thus controlling somewhat for teacher differences (Witzel, Mercer and Miller, 2003). One approach focused on the use of a concrete-representationalabstract sequence, while the other approach focused on the abstract only. All sets of classes were comprised of students with and without learning disabilities, with research measures focusing on the performance of students with learning disabilities. Although all students performed higher on the post-test as compared to pre-test scores, students who received instruction using a concrete-representationalabstract explicit instruction approach sequence performed higher on pre-test to post-test measures than students taught using an abstract-only approach. The authors also note the importance of closely examining how the concreterepresentational aspects are used in algebra instruction. That

is, simply using concrete-representational techniques may promote basic knowledge and skills in the short term, but may not promote conceptual knowledge needed for more complex algebraic understanding. Their work focuses on the latter, and is instructive for teachers in realising that it is not just *which* technique is used (i.e., the name of the technique being concrete-representational-abstract), but *how* that technique is used to promote student learning (i.e., the specific way in which the concrete-representational-abstract is used).

Facts related to Fallacy 1: Students with Disabilities CAN Learn the General Education Curriculum. Focus on the 'How'

Fact: Students with Disabilities Learn When Techniques That Promote Their Learning are Used

The first fact is that some students with disabilities are capable of learning grade-level content from general educators who know and use research-based techniques that are responsive to their needs. The techniques used to increase the performance of students with disabilities also increases the performance of students who are low achievers (i.e., at-risk), average achievers, and the gifted (Baker, Gersten and Scanlon, 2002; Montague and Applegate, 2000; Palincsar et al., 2001). Some of these techniques are beginning to be termed 'universal design for learning' in that they are responsive to a wide range of students in heterogeneous classrooms (Cawley, Foley and Miller, 2003; King-Sears, 2001; Rose and Meyer, 2000). The concept of universal design originated in the field of architecture for designing, at the outset, buildings and structures that could be accessed and used by the greatest number of users. One example of universal design in architecture is the width of doorways that are already wide enough for someone in a wheelchair or a walker to move through them. Door widths in a universally-designed building do not have to be modified for users who need a wider doorway. Similarly, in education, a universal design for learning (UDL) paradigm is a shift from a 'one size fits all' mindset, so that variety and flexibility for diverse learners, including students with special educational needs, are built into instructional design, delivery and assessment.

UDL techniques cluster into three categories. First, there is flexibility in how content is represented to students. Second, there are varied ways for students to engage in learning activities. Third, students can express what they know in different ways. Some examples for each category are:

• *Representation:* Demonstration and presentation of new content in a variety of ways that incorporate auditory, visual and tactile methods, including instructional and assistive technology. New content is presented in more than one way. Explicit instruction is used, when students benefit from a structured and directed presen-

tation of new and/or complex information, including strategic processes and problem-solving, which is necessary for students to learn *how to* acquire and use new information.

- *Engagement:* Students may practice content independently, in small groups, with co-operative learning techniques. A variety of materials and activities are designed so that students have sufficient and varied opportunities to acquire proficiency in the new content. There are multiple modelling and guided practice opportunities to promote students' acquisition of and fluency with new content. Feedback is based on student performance and designed to promote students' self-evaluation and independence. There is ongoing monitoring of students' performance so that instructional changes can be made when data indicate the need is essential.
- *Expression:* Choices for how students show what they know for the new content are provided. For example, some students may choose to develop a three-dimensional project, others may choose to write a research paper, and others may deliver a presentation. Relevance and real-life applications of the content are emphasised to increase meaningfulness and promote motivation for learning.

Several researchers note the importance of teacher preparation programmes preparing educators who have positive attitudes about including students with special educational needs (i.e., disabilities) in general education settings (Mintz, 2007; Winter, 2006). It is also essential that deliberate instructional actions, based on well-developed lesson planning, either lead toward or derive from those positive attitudes. To that end, Spooner, Baker, Harris, Ahlgrim-Delzell and Browder (2007) found that teachers in graduate courses who received a brief introduction about UDL designed lesson plans accessible for diverse students, whereas the control group of teachers, who received no UDL instruction, designed lesson plans with fewer modifications, alternatives for communication, and activities that involved students. Moreover, the teachers who received the UDL professional development pre-planned for differentiation, which the researchers noted could ultimately be more efficient planning and effective use of instructional time rather than creating modifications after 'traditional' instruction has not worked. Their research is an example of how access to the general education curriculum can increase when different instructional approaches (i.e., representation as UDL) are pre-planned.

For example, middle school students with mathematics disabilities were taught equivalent fractions using two approaches (Butler, Miller, Crehan, Babbitt and Pierce, 2003). One approach focused on a concrete-representational-abstract technique, and the other focused on a representational-abstract technique. All students improved from pre-test to post-test measures after ten weeks of instruction, and the students who received the concrete-representational-abstract approach seemed to have a

stronger conceptual understanding of fractional equivalency on one sub-category than students who received instruction using the representational-abstract approach. Moreover, post-test performance for both treatment groups was comparable to a comparison group of general education eighth graders. In fact, students with mathematics disabilities who received one of the treatments performed significantly higher than the comparison group of eighth graders on improper fraction and word problem post-test measures. Consequently, research-based techniques that were initially designed to improve the performance for students with disabilities may also benefit students who do not have disabilities. In addition to the effectiveness of the two approaches used in this study, the authors noted the importance of ongoing assessment to increase teachers' awareness of when specific students needed instructional changes. Although the majority of students could progress at similar paces, it was critical that students who had not yet reached mastery were able to receive feedback (i.e., review of errors) and additional instructional opportunities (one session may suffice) in order to progress.

Instructional approaches address not only the materials used, but how they are used. Middle and high school students with learning disabilities who received instruction using manipulatives to calculate perimeter and area problems were able to acquire these skills rapidly (Cass, Cates, Smith and Jackson, 2003). In addition to using manipulatives, the students' teacher used modelling and prompting as effective teacher behaviours within a gradual sequence of moving the students from guided practice sessions to mastery in independent practice sessions (i.e., engagement as UDL). The students were sufficiently proficient after this type of instruction that they remembered the information two months later, and they were also able successfully to transfer their skills from a manipulative approach (i.e., expression as UDL) to a paper and pencil problem-solving format.

Fact: Some Students with Disabilities Need Instruction Beyond That Reasonably Available in General Education Settings

The second fact is that some students with disabilities need instructional opportunities and focus that occur beyond instruction in general education settings. This fact should not be misconstrued as releasing general educators from a professional responsibility to employ techniques that are responsive to diverse student needs in content classes, nor should it be re-interpreted to mean that students with disabilities should receive all content instruction from special educators. The fact is that some students with disabilities need more than what can reasonably be expected for general educators to accomplish within the time and conditions of a general education setting – even at its most effective (Baxter, Woodward, Voorhies and Wong, 2002). The fact is that these students' needs should form the basis for the specialised instruction that special educators deliver. Students' needs are both related to the general education curriculum and related to their individualised needs, such as increasing reading comprehension skills and acquiring problem-solving strategies.

For example, Woodward, Monroe and Baxter (2001) found that in addition to solid instruction in general education mathematics settings, intensive tutoring was critical for the success that students with learning disabilities in their study experienced in mathematics performance assessments that mirrored the state-wide assessment. Woodward et al. compared mathematics performance assessment results for students with learning disabilities, low achievers, and typical students who received mathematics instruction under a control condition (grade-level text and curriculum) and an intervention that also used grade-level text and curriculum, but had an increased focus on problem-solving instruction. Students with learning disabilities in the latter group also received additional instruction from a tutor, in which the focus was on the problem-solving content being taught in general education. They found that students with learning disabilities who received mathematics instruction from the general education teacher along with intensive tutorial support achieved higher levels of growth between October and February, as measured by a performance assessment designed to emulate the state-wide assessment. Moreover, students with learning disabilities scored higher on the performance assessment than at-risk and averageability students in the comparison group.

Fact: Some Students with Disabilities need Instructional Focus that is not Solely Based on Large-Scale Assessment Content

The final fact is that some students with disabilities are required to focus on instruction geared solely towards largescale assessment content in place of more meaningful and appropriate academic, social and vocational preparation for life-long success. It is deeply troubling when the perception and/or reality is that all or most students with disabilities are focused primarily on content aligned with large-scale assessments, even when the parents, teachers and students believe that more school instructional hours should be focused elsewhere. However, such mis-matches also indicate that the instruction, or pedagogy, for students with disabilities needs to be examined. To that end, issues surrounding a 'one size fits all' approach to instruction must be addressed.

Fallacy 2: Teachers are Required to Cover the Curriculum, Regardless of Student Learning

As high-stakes assessments spread across the landscape of education, educators receive and perceive increasing pressure for ensuring high students' scores. Although one intention of high-stakes assessments is to achieve accountability for teaching and learning, the potential for such accountability to impact adversely on teaching and learning also exists (National Joint Committee on Learning Disabilities, 2004). Volger (2003) notes that some high-stakes outcomes provoke administrators, particularly in schools where students' scores are low for a variety of reasons, to impose stringent and immediate curriculum focus. That the curriculum should be the focus of instruction is not controversial. That the narrow band of curriculum that is assessed via high-stakes assessments is the sole focus *is* controversial. The controversy surrounds a variety of issues.

In some schools, a pace for instruction is set that all content teachers are required to adhere to. For some learners, such as those at-risk for school failure and students with disabilities, the pace is too fast and too complex for their learning to be meaningful and for the students to acquire much information. Even when students would be more successful with grade-level content if they received instruction on background knowledge, skills and strategies for the curriculum, there is an impetus to begin at the curriculum's starting point and move at the same pace through the curriculum in preparation for large-scale assessments. Consequently, the students' large-scale assessment scores are not as high as they could be if the pace and focus of instruction were altered to be responsive to their diverse learning needs.

Some educators feel that an inordinate amount of teaching is focused on 'getting through the curriculum' so that the content of large-scale assessment is sure to be covered. However, they also feel that such coverage does not equate with teaching and learning. Porter (2002) notes that some state content standards already include excessive content, precluding in-depth instruction. Some educators feel a need to focus solely on test content, and so narrowing the instructional focus may occur at the expense of more in-depth and meaningful focus. Additionally, other educators have problems with the content of such assessments, and so feel that they should not confine valuable instructional time to focus solely on items likely to feature in large-scale assessments. In short, educators receive and perceive mixed messages related to how much of the curriculum they are expected to cover, the depth and breadth of the content, and the pace of instruction. These messages result in pedagogical dilemmas when educators feel they must leave some students behind (generally, these students are those who have mild disabilities or are at-risk for school failure) in order to cover the curriculum.

Learning of content can occur, but does not in middle school classrooms where 'one size fits all' instruction is used and the pace of curriculum coverage is swift and non-responsive to students' learning. Such growth does occur in secondary school classrooms where differentiation occurs (Broaddus and Ivey, 2002; Kilgore, Griffin, Sindelar and Webb, 2002). Educators must feel empowered to acknowledge and respond to students who are beginning at different levels and so will grow to different levels, if they are provided suf-

ficient and appropriate instruction. Similarly, administrators must promote the progress of students from the students' entry level of knowledge and skills, and not from the entry level of where a specific grade level curriculum begins. Thereby, authentic yearly progress can occur.

Heubert and Hauser (1999) caution test users about distinguishing between effective instruction that focuses on students' mastery of content (and so may be remedial in nature) versus narrow instruction that focuses solely on test content. Determining the balance between opportunities to master content versus opportunities to be exposed to content is difficult. Certainly students with disabilities need more exposure to the general education curriculum than they have had in the past. However, exposure may not suffice. Exposure to the entire curriculum needs to be examined in terms of whether it should be prioritised over mastering essential content in a portion of the curriculum. Some students may master less content, but learn more because they have experienced in-depth learning versus surface exposure to the entire curriculum. Teachers are concerned when they hear administrators and other school system personnel telling them they need to 'cover the curriculum' and 'move onward for those students who are capable of getting it', even when the movement leaves other students, who are also capable of getting it, behind.

Facts related to Fallacy 2: Schools That Promote Differentiation can Potentially Achieve Higher Scores on Large-Scale Assessments Than Schools That Promote 'One Size Fits All' Instruction

Stake (1998) notes the incentive for schools to find reasons to 'excuse' students who are likely to lower the schools' scores on high-stakes assessments. When administrators review school scores and determine that school averages would be increased if they did not need to include students with disabilities in the calculations, one response is to find ways to exclude the students from those tests. However, this is not an ethical response. Nor is it ethical for school leaders inadvertently to provide negative verbal messages to teachers and students that 'if we didn't have to count the scores for students with disabilities, we'd be looking much better.' One way to 'look much better' is to ensure that differentiation occurs in general education settings. Differentiation has the potential to increase the scores for students with disabilities, students at-risk for school failure, typical students, and students labelled as gifted and talented.

Fact: Differentiated Techniques are Responsive to Diverse Student Needs

Differentiation that is solely geared to students considered to be at the 'lower end of the spectrum' is not true differentiation. In fact, authentic differentiated settings are responsive to the needs of all learners, not just learners with disabilities. The central tenet for promoting differentiation

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is that the progress of students with diverse learning needs, when appropriately challenged and sufficiently taught, can increase school and school district scores on large-scale assessments.

Differentiation provokes examination of the learning levels and needs of all students. Montague and Applegate (2000) note how differently mathematics word problems are solved by middle school students labelled as gifted, average achievers, and who have learning disabilities. Students who were gifted solved problems more quickly than students with learning disabilities and average achievers. Average and gifted students more accurately solved the problems. These results have implications for all three groups. Gifted students, once they have mastered the content, need to move into more challenging content. Average achievers, if they used more efficient problem-solving techniques, could increase their rate of response, leaving more time for moving into more challenging content for them. Students with learning disabilities need to learn efficient problemsolving techniques (as did the average achievers), and they also need a focus on accurate application of those techniques so that they, too, can move into more challenging content.

Fact: Differentiated Techniques Promote Active Student Involvement in Learning

A synthesis of the research base on reading instruction in inclusive settings reveals that techniques such as co-operative learning and peer-mediated instruction can result in substantial gains for students with and without disabilities (Doveston and Keenaghan, 2006; Schmidt, Rozendal and Greenman, 2002). Moreover, peer-mediated instruction, such as classwide peer tutoring when students switch roles as tutors, provides opportunities for all students to be actively engaged in the practice of content that can be individualised so that each student is appropriately challenged (Greenwood, Arreaga-Mayer, Utley, Gavin and Terry, 2001).

Collaborative Strategic Reading is another differentiation technique that has been successfully used in middle school settings to increase reading comprehension and impact on content area learning for students with and without disabilities (Vaughn, Klingner and Bryant, 2001). Collaborative Strategic Reading builds in activities designed to activate students' background knowledge, enhance vocabulary development, and identify and summarise main ideas. After teachers have taught the whole class the strategies and students have had opportunities to practise the strategies, they divide into small heterogeneous groups with each student having a specific role (which has been pre-taught). In one study, the researchers found that using Collaborative Strategic Reading was extremely useful for some students in keeping up with complex textbook content and class instruction. After using Collaborative Strategic Reading, teachers

noted that a higher percentage of their students passed high-stakes assessments.

Learning centres in the classroom setting can also be designed so that small groups of students can practise content in different ways at the same time. King-Sears (2005; 2007) describes how to design learning centres, teach students how to transition from centre-to-centre, and imbed informal assessment with learning centre activities so that it is evident that instructional decisions can be made (e.g., Which students are ready for more challenging content? Which students need more practice?). Some educators who use learning centres schedule small group instruction as a learning centre activity, which provides opportunities for students who need reteaching to receive it, and opportunities for students who are ready to be taught more advanced content to receive that. Again, the focus with learning centres is that differentiation occurs for students learning at different levels. Each student should be sufficiently challenged in his or her learning so that satisfactory progress occurs and sufficient instructional and practice opportunities are provided. Organising classroom learning centres is one way to design and deliver differentiated instruction.

Fact: Progress Monitoring Informs Teaching and Learning

Given students' diverse entry points for content instruction, it is essential to gather data that enable teachers to determine who needs what instruction. A pre-test or similar diagnostic instrument should be used to determine who needs instruction on which skills. Most likely, some students will need instruction on prerequisite skills, some students benefit from a brief review of previously-learned skills, some are ready to begin on grade level, and some are already beyond entry level skills. Consequently, it is important to know who knows what. However, it is not enough to know what students' entry skill levels are; monitoring progress during instruction provides information on how quickly students are acquiring skills so that they can move on to more complex skills at an appropriate pace (National Association of School Psychologists, 2003). Without progressmonitoring data that indicate when students have mastered skills, it is difficult for teachers to know when to move students on to the next skill set, and when to stay with students for mastery of the current skill set.

Stecker and Fuchs (2000) found that the mathematics performance of students with mild to moderate disabilities, who completed weekly curriculum-based measurement (CBM) probes that their teachers used to make instructional adjustments, scored significantly higher on an assessment designed to mirror the state-wide curriculum, which is also used for grade promotion. The curriculum-based measurements consisted of mathematics content targeted for yearend proficiency. Computerised software was developed based on the mathematics content. The software was used for students to complete the CBM, score students' results, display graphs of students' performance over time, and prompt teachers about when to make instructional adjustments (based on students' data). Prompts included both when the student needed remedial instruction as well as when more challenging content needed to be introduced. Consequently, teachers were aware of when students were not keeping pace with instruction as well as when students were exceeding the pace and needed more challenging content. The teachers made similar instructional adjustments for matched peers with mild to moderate disabilities based on CBM data for another student; matched peers' performance was not significantly higher, indicating the importance of instructional adjustments based on specific student data rather than assuming that similar students need the same instructional adjustments. On the one hand, it is time-consuming to gather CBM data and analyse individual student scores. On the other hand, without CBM data, it may be that instructional time is not being used wisely if students are not receiving instructional adjustments that are good matches for them based on their CBM profiles. In other words, although the control students were receiving instruction, it was not based on their needs, and their performance on the simulated state-wide assessment reflected that: their scores were not as high as those for whom appropriate instructional adjustments were made.

Summary: differentiation to promote gains for all students

Two fallacies are addressed in this article. The first relates to whether students with disabilities are capable of learning the general education curriculum, and the second relates to the pace and focus of how curriculum is taught. Students with disabilities can learn more than they have previously had opportunity to learn for the general education curriculum, and their learning increases when the pace, focus and format of instruction is responsive to their learning needs.

General educators feeling pressure to cover so much content with so many students' learning levels and at a swift pace are understandably overwhelmed. On top of that, they and their administrators are anxious about the high-stakes consequences when their students do not show adequate yearly progress on large-scale assessments. One response to minimise the adverse consequences is to maximise the use of differentiation techniques so that all levels of students progress. It is not sufficient, although it is important, that techniques amplify the growth of students with disabilities and students who are at risk for school failure. It is equally important that the techniques accelerate learning for average students and students who are higher achievers. Moreover, it would be more revealing for students to complete a pre-test of a large-scale assessment so that teachers could design year-long instruction according to diagnostic and useful information. A similar post-test at the end of the school year would provide more authentic evidence of students' yearly progress, in that the percentage gain for students taught during that school year could be calculated. The benefits gained from administering two sets of large-scale assessments must be balanced against the instructional time investment needed to do so. However, the benefits also need to be balanced against the existing perils of using one set of large-scale assessment scores to make high-stakes decisions.

Without differentiation, without attention to students' entry levels for instruction, and without adequately monitoring students' progress during the instructional year, students will be left behind and it may not seem that every child does matter. In very practical terms, the focus must shift from forcing all students achieving to the same standard and focus on all students achieving higher standards than they would have had the opportunity to achieve without differentiation and access to the general education curriculum. Moreover, it is a complicated decision to focus students with disabilities solely on success for large-scale assessment scores at the exclusion of specialised instruction that addresses their learning needs. Authentic yearly progress related to students' academic goals may not be reflected using solely a large-scale assessment score. Educators are faced with complex decisions about these issues. Nonetheless, that schools are charged to ensure that students with special educational needs have appropriately challenging opportunities to learn and be assessed on general education curriculum content is an opportunity to ensure that students with disabilities count. Caution about how they count and what is counted is necessary to promote authentic yearly progress in critical learning areas for students with disabilities.

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