

# M<sup>2</sup>ECCA:

## A Framework for Inclusion in the Context of Standards-Based Reform

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It is the beginning of the school year. Montel is one of several students with disabilities in an inclusive third-grade classroom. He is 8 years old and has a learning disability; his word recognition and comprehension skills are at a beginning first-grade level. During the spring, like the rest of his classmates, Montel will take a state assessment designed to measure his performance against established state standards (see box, “Standards-Based Reform and Special Education”). In the area of reading, for example, the assessment will expect that Montel can do the following:

- ✓ Use a wide range of strategies, including using context clues and predicting outcomes, to comprehend third-grade literary and recreational materials in a variety of genres.
- ✓ Use a wide range of strategies and skills—including retelling information, using general context clues, and making inferences to identify the main idea—to comprehend third-grade functional and textual/informational reading materials (Alabama State Department of Education, 2003).

Montel’s teacher, Ms. Noble, wonders how to best focus her instructional energies to maximize learning outcomes for Montel with respect to these standards. Given Montel’s rate of progress thus far, she wonders how she can make a measurable difference by spring.

### Standards-Based Reform and Special Education

With the passage of the No Child Left Behind Act, interest in standards-based reform has grown. Typically, standards-based reform implies an attempt to boost the academic achievement of all students by establishing rigorous educational standards for all, aligning instruction with those standards, and using accountability assessments to measure progress toward meeting those standards. Often, standards-based reform involves rewards and sanctions for schools and for teachers. The established standards apply to almost all students, including those with disabilities (Thurlow, 2002). No one knows with certainty whether this practice will have a positive or negative influence on the education of students with disabilities. Nevertheless, standards-based reform prevails in today’s educational environment, including special education.

As a consequence of the current wave of standards-based reform, many teachers feel frustrated and overwhelmed by what they see as competing demands to address the needs of an increasingly diverse student population and to attain the same standards with all students, including most of those with disabilities (Defur, 2002).

### The M<sup>2</sup>ECCA Framework

M<sup>2</sup>ECCA, which was developed to guide teachers’ thinking about inclusive standards-based classrooms, is a framework for inclusion in the context of standards-based reform. The M<sup>2</sup>ECCA framework, depicted in Figure 1, focuses on the following critical components of inclusive instructional environments:

- ✓ Methods of instruction.
- ✓ Materials of instruction.
- ✓ Environment of the classroom.
- ✓ Content of instruction.
- ✓ Collaboration.
- ✓ Assessment.

Fifty general and special education elementary teachers who serve students with high-incidence disabilities in inclusive, standards-based classrooms field-tested this framework over a period of approximately 5 months. Having a framework helps teachers think about how to successfully implement standards-based reform in classrooms that include learners with high-incidence disabilities (see box, “M<sup>2</sup>ECCA for Inclusive Standards-Based Classrooms”). Providing time for teachers to work collaboratively in applying this framework is also critical. The following discussion highlights each element of the M<sup>2</sup>ECCA framework.

## M<sup>2</sup>ECCA for Inclusive Standards-Based Classrooms

### Methodology

#### Student strengths/interests/experiential base

What are the student's strengths, interests, and experiences?  
How can teachers use these strengths, interests, and experiences to facilitate instruction?

#### Student cognitive style

How can teachers best present these concepts to the student?  
How can educators control the level of difficulty?  
What kinds of guidance and support will the student need?

#### Instructional format and arrangement

What instructional formats or arrangements—activity-based instruction, lecture, peer-mediated instruction—are best suited to the needs of the student and the goals of the lesson?

#### Compensatory strategies

What strategies should educators use to circumvent the area of disability?

### Materials

#### Format and variety

Do the instructional materials connect the strengths, interests, needs, and experiences of the student?  
Is cultural plurality evident in the materials used?  
Has the teacher considered multiple learning modalities?  
What adaptations may the student need?

#### Supplementary materials

What technological aids or other materials may facilitate the student's mastery of the targeted concept or skill?  
What compensatory materials or equipment may the student need to circumvent the area of disability?

### Environment

#### Classroom climate

What can educators do to create a nurturing classroom environment for all students?  
How can educators value individual differences?  
What proactive strategies can educators use to minimize behavior problems?

#### Physical arrangement

What seating arrangement can maximize the student's chances for success?  
What arrangement of equipment and materials can maximize the student's chances for success?

#### Rules and routines

What classroom rules and routines would maximize student success?  
How might educators need to augment these rules and routines for a particular student?  
What specific behavior-management plans may educators need to develop?

#### Knowledge of appropriate behaviors

Is the student aware of appropriate behaviors and responses?  
What specific behaviors does the student need to learn?  
Does the student need self-monitoring skills?

### Content

#### Student ability and prior knowledge

What does the student already know?  
What can the student already do?  
Where is the student relative to where the teacher is trying to go?

#### Critical concepts and big ideas

What are the most critical concepts that students need to learn?

#### Strategies for learning how to learn

Does the student know and use effective learning strategies and skills?

#### Tool and process skills

Does the student have requisite literacy and math tool skills?

### Collaboration

#### Exchanging student information

How can general and special education teachers exchange information about students that they share?

#### Collaborative problem-solving

How can general and special educators collaboratively problem-solve about students that they share?  
When can this problem-solving take place?

#### Collaborative teaching

How can general and special educators work together in delivering instruction?  
What model of co-teaching should educators use?  
What structures and other resources must be in place so that this model can be successful?

### Assessment

#### For guiding instruction

Have educators used informal assessment strategies to collect needed information about the student to support her or his success?

#### For student evaluation

Is the nature of assignments and other assessment strategies varied?  
Are assignments and other assessment strategies appropriate to the student's learning profile?  
Does the student need any accommodations or modifications?  
How will the teacher deal with grading issues?

#### For accountability—standardized assessment

Does the student need any accommodations?  
Has the IEP committee discussed and approved these modifications?  
Does the IEP document these modifications?  
Do educators routinely use these accommodations in teaching the student in question?

**Figure 1. The M<sup>2</sup>ECCA Framework**



### Methods of Instruction

In inclusive classrooms, the method of instruction is a critical consideration in implementing standards-based reform. How teachers decide to teach is important for all learners, but particularly for those with disabilities, those who may be culturally different, or those who vary in other educationally relevant ways from typical students (Hardin & Hardin, 2002).

In the case of Montel, who is a struggling reader, his teachers need to think about the learning contexts that seem most productive for him. They should consider the following questions:

- ✓ Does he seem to learn best when working on individual assignments or when working on group assignments?
- ✓ Does he learn best through hands-on activities or by working with pencil and paper?
- ✓ Does he need frequent and repeated reviews of content to achieve mastery?
- ✓ What are his interests?

- ✓ What does he like to read?
- ✓ In what areas does he seem to have particular strength—music, physical activity, visual/spatial skills, logical reasoning, and so on?

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If, for example, Ms. Noble learns that Montel is a sports enthusiast, incorporating sports-related content into instruction may enhance the likelihood that he will connect with this instruction. Likewise, if Montel seems to learn best through tactile-kinesthetic activi-

ties or if he works best in groups rather than individually, Ms. Noble can use these methods in instruction. Allowing Montel to work together with peers in building his sight words or spelling words with magnetic letters or in tracing these words in felt letters with his fingers while saying the word might be more appropriate for his learning style than traditional methods.

### Materials of Instruction

Making decisions about the instructional materials is a natural outgrowth of considerations regarding instructional methodology. For example, do instructional materials connect well with the student's abilities, interests, experiences, and learning styles? Although Montel reads at a beginning first-grade level, his interest level is probably more similar to that of other students his age. His teacher should therefore consider high-interest/low-vocabulary materials. Educators should also consider issues regarding cultural plurality and should make sure that the textbooks are culturally responsive (Banks, 2001).

Assistive technology is an additional area that educators must consider with respect to instructional materials and equipment (see box, "What Is Universal Design for Learning?"). As an example, consider textbook use for Montel. Many textbooks are available in a variety of formats, including standard format, reduced reading level, large print, audiotape, and digitized (e-text) on a CD. The digitized format provides additional visual and auditory options. Montel could load the CD text into a computer, change the background and font color to meet his learning needs and preferences, enlarge the text, or have the text read aloud by using screenreading software. Screenreading software also offers a variety of other supports, including highlighting word by word or line by line as the text is read. Additional assistive technologies could support Montel in his efforts in such other skills as writing. Voice recognition software can allow him to dictate his work. Talking word processors can provide auditory feedback as he enters information, and word prediction soft-

ware can provide visual and auditory spelling support.

### Environment of the Classroom

Physical, organizational, and social environmental concerns are critical factors in engineering the successful standards-based inclusive classroom. In looking at the physical environment, the teacher must think about such issues as how students are positioned in the classroom and whether the manner in which they are seated facilitates or hinders their success. Specific considerations in Montel's case might include the following:

- ✓ Is he easily distracted?
- ✓ Does he need a quiet work area away from peers?
- ✓ Does he need to be seated in close proximity to peers to participate in cooperative learning groups?
- ✓ Would he benefit from a sound field system, which might enhance his attention by allowing Ms. Noble to use a microphone and FM system to broadcast her voice through speakers mounted in different parts of the classroom?
- ✓ Do his needs in this regard vary by task?

Aside from the physical placement of students in the classroom, educators need to think about the efficient use of furnishings, equipment, and materials to differentiate instruction:

- ✓ Are individual student mailboxes needed to distribute personalized task cards or work packets?
- ✓ Should instructional technology be available that provides multisensory opportunities for learning?
- ✓ Should the teacher create learning centers to use as a means of differentiating instruction? If so, where and how should they be housed?
- ✓ How can the teacher use bulletin boards and wall space in the classroom?
- ✓ In what ways can the physical space and furnishings be organized to support differentiated instruction?

The social environment is an additional factor that contributes to the successful inclusive classroom (Voltz, Brazil, & Ford, 2001). In diverse, inclu-

### What Is Universal Design for Learning?

The physical environments in schools and communities have been designed for a variety of needs, and the curriculum must also be designed for a variety of needs. This concept is known as universal design for learning (UDL). UDL originated in the field of architecture to meet the demands of the Americans with Disabilities Act (ADA). Educators have expanded the same concepts and recognize that retrofitting curriculum with a diversity of learning options and assistive technology is not as effective as embedding these concepts, opportunities, and support for learning when designing the curriculum (Schleef, 2003).

sive classrooms, learners must understand that "fair" does not mean that everybody gets exactly the same thing, but rather that everybody gets what they need—and that there are individual differences with respect to need. It also is important to establish that such differences are not bad. Rather, students should learn to value individual differences as a way for them to learn from one another and a way to make the world a more interesting place.

Behavior-management strategies play an important role in every classroom. If students are not able to effectively engage with the content of instruction, inappropriate behaviors are more likely to occur. Consequently, using differentiated instruction is a proactive strategy that can reduce behavior problems. Also, just as some students require explicitness in instruction, some require explicitness with respect to behavioral expectations. A general rule such as "respect the property of others" may not be concrete enough for some learners. The teacher may need to provide explicit examples and nonexamples of respectful behavior. In addition, discussing the concept of "property" may be necessary, particularly for younger students.

Many culturally influenced factors also affect a student's classroom behavior (Neal, McCray, Webb-Johnson, & Bridgest, 2003; Townsend, 2000). In some cultures, it is not uncommon or viewed as disrespectful for speakers to engage in overlapping verbalizations, that is, for more than one person to speak at a time. In other cultures, people consider this practice to be rude. Likewise, in some cultures, a higher level of physical activity and verbal discourse may be a natural accompaniment to cognitive activity; whereas in other cultures, there may be a greater compartmentalization of these activities (i.e., doing only one thing at a time). Educators must also consider these factors in designing responsive educational environments.

### Content of Instruction

Although established standards often dictate the general parameters of the content of instruction, standards do not generally specify the incremental steps necessary to attain established content standards with a given child. Standards-based IEPs can help bridge this gap.

Consider Montel's scenario. From a content standpoint, Ms. Noble will first need to glean as much specific information as possible about what Montel is and is not able to do with respect to the standards in question. She should think about the following questions:

- ✓ What are Montel's decoding skills like; can he decode unknown words of various patterns (e.g., CVC, CVCe, CCVC)?
- ✓ What kinds of cueing systems does he currently use as a reader?
- ✓ Can he use context clues in reading material at his current grade level?

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**Physical, organizational, and social environmental concerns are critical factors in engineering the successful standards-based inclusive classroom.**

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- ✓ How are his language skills and listening skills; is he able to comprehend material at the third-grade level when someone reads aloud to him?
- ✓ Are decoding and word recognition his primary barrier, or is there a more pervasive problem of understanding language—or is the challenge equally balanced between the two?

After raising and answering fundamental questions such as these, Ms. Noble will be in a better position to focus her energies more effectively. For example, if Montel can comprehend and analyze third-grade-level material when someone reads aloud to him, word recognition and decoding may be the primary barrier to his success with the standards in question. The teacher may then need to emphasize this area in instruction for Montel, whereas assistive technology, such as screenreaders, can provide the reading assistance that will allow him to continue to use content-rich reading materials.

Beyond standards that have been established for all learners, instructional content for students with disabilities may need to include other areas, as well. For example, some learners with disabilities need instruction in social skills. Others may need specific instruction in learning strategies and cognitive behavior-management strategies.

## Collaboration

Collaboration is the foundation of successful inclusive environments. For inclusive educational environments to work, general educators, special educators, counselors, administrators, assistive technology specialists, and parents need to work together effectively as a team. For example, in developing standards-based IEPs, these parties must do the following:

- ✓ Determine where students are relative to established standards.
- ✓ Use students' learning characteristics as a guide and established standards as benchmarks to set learning goals and objectives.
- ✓ Decide the nature of the educational supports needed to help each student accomplish the targeted learning goals and objectives.

- ✓ Determine how to assess students' progress, and determine the assessment accommodations that are required.

In implementing IEPs in inclusive environments, collaboration continues to be paramount. Information about student progress needs to be shared among team members, and team members need to participate in collaborative problem-solving to address any instructional or behavioral challenges that may emerge. Supportive collaboration also

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may involve general and special education teachers jointly delivering instruction through a co-teaching model and jointly conducting parent conferences.

## Assessment

Assessment is fundamental to providing individualized instruction. Assessment both begins and ends the M<sup>2</sup>ECCA cycle and occurs on a variety of levels. Educators use assessment to guide instruction, monitor student progress, and guide program evaluation. All these functions are critical to effective instructional programs.

In guiding instruction, assessment helps teachers answer such important questions as the following:

- ✓ What does the student already know relative to a given standard?
- ✓ What should be the focus of instruction?
- ✓ How does the student learn best?

Answering these questions helps develop the individualized instruction

that is the cornerstone of special education.

In its role in monitoring student progress, assessment helps measure the effectiveness of instruction. For example, if Ms. Noble has planned a mini-unit that focuses on decoding CVC words for Montel and other students, she will probably plan some sort of assessment to determine how well the students master the content in question. So that this assessment can be as effective as possible, it will need to allow the students a variety of ways to show what they know relative to the goals of the unit. Having students read CVC words in isolation and in context may be one type of assessment. Some assessments may take a gamelike format, such as having students play charades with CVC word cards or play bingo using CVC words. The idea is to accommodate variations in learning preferences by giving students as many ways as possible to demonstrate competence.

Finally, another major purpose of assessment is program evaluation. This form of assessment is more summative than formative and usually involves the aggregation of several pieces of data. For example, in the context of standards-based reform, educators typically use accountability assessments to determine which students in which districts or schools are meeting the established standards. Most students with disabilities are expected to take these standardized assessments, which have been developed to reflect the content of the standards, along with their nondisabled peers. However, these assessments typically allow some accommodations, in accordance with the student's IEP. The questions in the assessment section of the M<sup>2</sup>ECCA framework featured in the box “M<sup>2</sup>ECCA for Inclusive Standards-Based Classrooms” provide important considerations with respect to students with disabilities and accountability assessments.

## Final Thoughts

The current era of standards-based reform has challenged educators in general and special education to redouble their efforts in promoting the success of students with disabilities in the general

education curriculum. Collaborative teams consisting of general educators, special educators, counselors, administrators, assistive technology specialists, and parents must reexamine and refine their roles and contributions.

Given the diversity of today's classrooms, the M<sup>2</sup>ECCA framework has the potential to assist educators in moving all students—not just those with designated disabilities—toward meeting established standards. This framework exemplifies the necessity for each educator to systematically take time to learn as much as possible about his or her students. The more data that teachers accumulate about learner dispositions, needs, and preferences, the better able they will be to differentiate their pedagogical plans.

Although varying opinions exist about the No Child Left Behind legislation, educators can embrace its general goal of enhancing the achievement of all students. Teachers with requisite tools to positively influence their students' learning can work more effectively in accomplishing this goal. The M<sup>2</sup>ECCA framework provides a structure for gen-

eral and special education teachers to collaboratively examine critical aspects of the instructional context to enhance learning outcomes for all their students, including those with disabilities.

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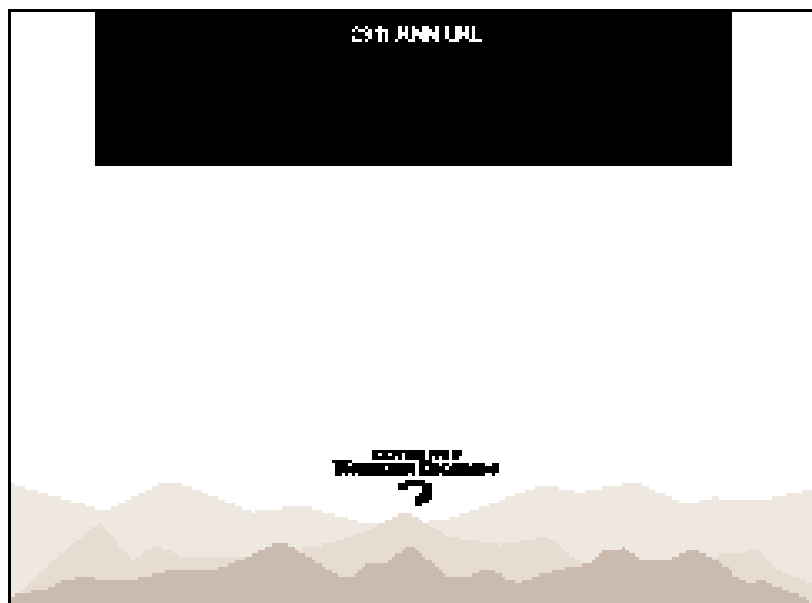
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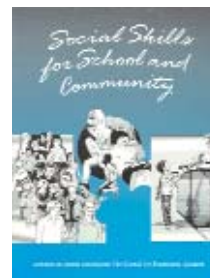
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