EACHING AND LEARNING

he purpose of this section is to illustrate what standardsbased teaching and learning looks like in today's classrooms. Five vignettes representing experiences in early elementary, later elementary, middle school, and high school classrooms are featured in this section. They reflect teaching and learning based on content standards and benchmarks in social studies, English language arts, mathematics, science, and interdisciplinary study. The vignettes provide examples of Michigan teachers who are making decisions about how to incorporate the content standards and benchmarks into their instructional planning. They are designed to help educators begin a discussion about standards-based teaching and learning. The vignettes do not advocate a single best practice or method of instruction. They are not prescriptions of what must be done; they are examples of what can be done when teachers reflect on how to align curriculum, instruction, and assessment in order to promote meaningful student understanding of the content standards and benchmarks.

As an introduction to the vignettes, this section describes four standards which form the foundation of authentic teaching and learning. These standards are: higher-order thinking, deep knowledge, substantive conversation, and connections beyond the classroom. Effective implementation of the Standards for Teaching and Learning assumes that the classroom context is predicated on the belief that all students can and will learn. In order to be successful, instruction must not only incorporate the standards listed above, but it must also take place within an environment that provides sufficient social support to permit all students to learn no matter what their gender, ethnicity, socioeconomic status, disability, English language proficiency, or preferred learning style. An atmosphere of positive social support occurs when the teacher conveys high expectations for all students and encourages students to take learning risks and try hard to master challenging academic work. The type of social support needed exists when the teacher's attitude and actions affirm the belief that all members of the class can learn important knowledge and skills. Positive social support requires creating a climate of mutual respect among all members of the class so that students with less proficiency are treated in ways that encourage their efforts and value their contributions. For more information about creating positive social support for learning and about selecting strategies that motivate all students to learn see the Connecting with the Learner Toolkit. (See "Appendix A.")

"In the long-term, education must aim for active use of knowledge and skill. Students gain knowledge and skills in schools so they can put them to work in professional roles—scientist, engineer, designer, doctor, business person, writer, artist, musician—and in lay roles—citizen, voter, parent—that require appreciation, understanding, and judgment."

David Perkins Harvard University

Social Studies Early Elementary Vignette

Marcia Harris teaches kindergarten at the Brookside School in Bloomfield Hills, Michigan. Brookside is a private school and part of the Cranbrook Schools. Cranbrook Schools service approximately 1,550 students in 6 programs: 1 early childhood, 1 elementary, 2 middle schools, and 1 high school. There are 223 faculty members on the Cranbrook staff. Kindergarten at Brookside is a half-day program. Time spent on social studies instruction each day ranges from 30 to 40 minutes. Ms. Harris shares the responsibilities for teaching 20 four- and five-year olds with teachers, Virginia Walden and Katie Fiebia.

The unit, **Where Do I Live?**, was designed by Ms. Harris and Ms. Walden. The unit is 31 lessons which integrate geography with language arts, social studies, mathematics, reading, and art. **Where Do I Live?** includes activities that develop map reading skills related to finding locations, interpreting symbols, and determining direction. The geography skills are developed within the context of the geographic themes of location, place, movement, and region. Each objective taught is developmentally appropriate and follows the model of involving students first in an enactive experience, then an iconic one and finally a symbolic activity.

The unit focuses on seven key objectives which include:

- understanding that an address includes a number and street name;
- understanding that a map is drawn from an aerial perspective;
- understanding that a symbol is a representation of a real object;
- understanding that a city includes places where people work, live, and shop;
- developing the ability to calculate distance;
- developing the ability to formulate a constructive response to a social problem in their neighborhood; and,
- recognizing that money is used to buy groceries and services.

The culminating social studies activity revolved around formulating constructive responses to a series of social problems in their neighborhood. Ms. Harris believes that this added an important social studies dimension to the unit.

Developing Perspective

Where Do I Live? begins with the enactive experience of observing a familiar piece of climbing equipment on the playground—the climbing dome. On the playground the students talk about the shape of the dome with Ms. Harris, offer descriptions, and draw the shape of the dome in the air using their arms. The students are developing the concept of a profile perspective.

Purpose of Vignettes

The vignettes included in this section are designed to illustrate how teachers might incorporate the Standards for Teaching and Learning (higher-order thinking, deep knowledge, substantive conversation, and connections to the world beyond the classroom) into their teaching units. The vignettes also illustrate how teachers might design instructional experiences which help students develop the knowledge and abilities identified in the standards and benchmarks. The Standards for Teaching and Learning and content standards and benchmarks being addressed in the unit are identified in the side-bar.

The following questions may facilitate group discussion:

I. How do the teachers create opportunities for students to learn and demonstrate the knowledge and abilities identified in the content standards and benchmarks?

- How does the teacher organize instruction so as to help students learn the knowledge and abilities described in the content standards and benchmarks?
- Are there any content standards and benchmarks addressed in the vignette that have not been identified?
- Which areas of the vignette might be expanded to incorporate content standards and benchmarks from other disciplines?

II. How do the teachers integrate the standards for teaching and learning into instructional activities?

- How does the teacher or program create opportunities for students to engage in higherorder thinking about the standards and benchmarks?
- What strategies does the teacher or program employ so as to ensure that students are processing knowledge and skills at a deep level of understanding?
- ◆ How does the teacher or program engage students in conversations that require them to discuss topics at a conceptual level?
- ◆ How does the teacher or program help students connect the knowledge and skills they are learning to the world beyond the classroom?
- ◆ How does the teacher or program use an understanding of learning styles to create diverse instructional approaches?

III. How does the teacher incorporate standards-based assessment into instruction?

- How does the teacher or program integrate assessment with instructional activities?
- How does the teacher align assessment with the standards and benchmarks?
- How does the teacher focus performance tasks on high expectations for student performance.

IV. How does the teacher integrate into instruction important instructional considerations such as interdisciplinary connections, technology, and school-towork connections with the learner?

- Where and how does the teacher or program create opportunities for students to make interdisciplinary connections?
- How does the teacher or program ensure that students are making connections to important knowledge and skills incorporated within a content area?
- How does the teacher or program incorporate opportunities for students to acquire, organize, analyze, and present information using technology?
- Where and how does the teacher or program help students develop skill in the use of technology?
- How does the teacher or program help students recognize and refine skills and knowledge used in the workplace?
- How does the teacher help students explore career connections or implications for the knowledge and abilities learned during the unit?

Making Instructional Decisions

The "Michigan Content Standards and Benchmarks" form a sound basis from which to build a strong curriculum. However, a strong curriculum is only one step. After districts answer the question, "What must our students know and be able to do?" they must ask themselves, "What kind of instruction will enable students to demonstrate the knowledge and abilities defined in their curriculum?"

The standards of authentic instruction and the topics listed as important considerations are important guidelines for developing sound instructional programs. (See Section III, pages 5-6 for further explanation.) The vignettes presented in this section are useful tools for beginning a discussion about authentic teaching and learning. One way that the vignettes can be used is to have a group of teachers read them and then reflect on how the teachers and programs described in the vignettes address the standards of authentic instruction, as well as the important considerations for effective instruction. As teachers study the vignettes they will form learning communities that will support those who are seeking to align their instructional programs with the knowledge and abilities defined in their district's standards and benchmarks.

The first vignette is written for an early elementary classroom studying social studies. The second is written for a later elementary focusing on English language arts. The third is written for a middle school classroom engaged in interdisciplinary study. The fourth is written for a high school mathematics class, and the fifth is written for a high school science class.

The vignettes can be used to facilitate professional development. In one instance teachers might be asked to read and reflect on one of the vignettes. In another instance teachers might be divided into five groups and asked to read and reflect on one of the vignettes. The vignettes could be distributed among the groups so that each group reads a different vignette. Then the various groups could be asked to share responses with the whole group.

After teachers have finished discussing one or all of the vignettes, they might be asked to reflect upon their own practice. They should think about an important unit taught in their course, and then consider the questions listed on page 4. Teachers should be given enough time to discuss their units in relation to how they address the standards and benchmarks and how they address the principles of authentic instruction. They might be asked to discuss ways they incorporate technology and interdisciplinary instruction into their teaching. They might be asked to discuss how they make connections with the learner and how they make school-to-work connections. The questions presented on page 4 provide an example of the types of questions that might be discussed. These questions should be modified to reflect the curriculum goals of the district.

Standards of Authentic Instruction

Authentic instruction is meaningful instruction. It helps learners move beyond memorization by creating learning experiences which demand sustained, disciplined, and critical thought on topics that have relevance to life beyond school. Research shows that when teachers and students engage in authentic instruction and learning, student achievement increases. Fred M. Newmann, Walter G. Secada, and Gary G. Wehlage at the Wisconsin Center for Educational Research have synthesized much of the research that relates to student achievement in A Guide to Authentic Instruction and Assessment: Vision, Standards, and Scoring. They tell us that students are most successful when they use and apply the knowledge they are learning and the abilities they are developing to solve real-world problems and conduct relevant investigations. The four standards of authentic instruction described by Newmann, Secada, and Wehlage are integral to the content standards and benchmarks. Each helps form a foundation from which increased learning and understanding stems. They provide a structure for instructional design in English language arts, mathematics, science, and social studies. These standards are:

- Higher-Order Thinking: Instruction involves students in manipulating information and ideas by synthesizing, generalizing, explaining or arriving at conclusions that produce new meaning and understandings for them.
- ◆ Deep Knowledge: Instruction addresses central ideas of a topic or discipline with enough thoroughness to explore connections and relationships and to produce relatively complex understanding.
- ◆ Substantive Conversation: Students engage in extended conversational exchanges with the teacher and/or peers about subject matter in a way that builds an improved and shared understanding of ideas or topics.
- Connections to the World Beyond the Classroom:
 Students make connections between substantive knowledge and either public problems or personal experiences.

Considering these standards helps individual teachers and instructional teams ensure that they are providing students with authentic learning opportunities. Incorporating the standards into instructional decisions helps create effective experiences for learning the knowledge and abilities described in the content standards and benchmarks. The standards of authentic instruction are embedded in the content standards and benchmarks. They help teachers enhance student learning by providing them with instructional opportunities that move them past a superficial understanding to an in-depth application of the knowledge and skills they are learning.

For more information about how to analyze instructional needs and use authentic standards for instruction, see Tier II, Discrepancy Analysis of Instruction and Tier III, Powerful and Authentic Social Studies.

The vignettes on pages 6 through 36, illustrate how the standards can be incorporated into instruction.

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