Session 13

Pulling It All Together:

Creating Classrooms and Schools That Support Learning

Developed by Linda Darling-Hammond, Suzanne Orcutt, and Daisy Martin

Stanford University School of Education

I. Key Question and Learning Objectives

Key Question

- How can schools organize for powerful learning?

Learning Objectives

- **Organizing schools around students' development and learning**—Teachers will understand that organizing schools for powerful learning means integrating what we know about children's development and learning with what we know about organizing curriculum and teaching.

- **Providing structural features that support powerful learning**—Teachers will understand the structural features of schools that support teaching and learning for understanding.

II. Session Overview

We will be able to create a successful system of education nationwide only when we base everything we do on what is known about how children and youth develop and learn.

—James Comer, M.D. (2001, p. 1)

Educators can organize classrooms and schools to become places where powerful learning occurs for a wide range of students. When we integrate and apply what we know about how people learn, we can create classrooms that better support teaching and learning for understanding. When schools are based on what we know about how students develop and learn, every aspect of teachers' work (e.g., how their days are organized, how teachers work with students, how teachers collaborate with one another) is reconsidered to support strong relationships as well as challenging intellectual work.

Today's society has raised expectations for both teachers and students. Teachers are expected to address state standards and assessments in their practice while helping different kinds of learners meet their individualized needs. Students are expected to learn more challenging material than ever before and to demonstrate their learning in new ways. Schools are expected to support "the growth and development of diverse learners with a wide range of learning styles, multiple intelligences, family and cultural backgrounds, and life experiences" (Darling-Hammond, 1994, p. 9). Not only do schools serve more diverse learners than ever before, they are expected to "teach for understanding"—that is to teach with the goal of helping students develop the ability to use their knowledge in novel ways (Perkins, 1998). The rhetoric of our national education agenda is to leave no child behind, "to ensure—for all students in all communities—a genuine right to learn" (Darling-Hammond, 1997, p. 5).

Some schools have been able to achieve extraordinary results by designing themselves around how students learn. They are able to help all of their students master challenging content and develop critical-thinking skills by organizing teaching so that they know their students well, teach them in developmentally appropriate ways, and support their social, emotional, and academic growth. These learning-centered schools connect to students' families and incorporate their cultures into the curriculum. They organize the curriculum around the core ideas in the disciplines, and then they carefully scaffold students' learning on authentic tasks. Students' work resembles the work that real writers, scientists, mathematicians, and historians do, and it is produced with continual feedback, reflection, and revision to meet high standards.

This session synthesizes the body of learning theory presented in this course and suggests how it can be used to organize school environments that support teaching and learning for understanding. To illustrate these ideas, this session highlights a public, third- through eighth-grade restructured school, Birmingham Covington School, Bloomfield Hills, Michigan, and a new, small public high school, East Palo Alto High School in East Palo Alto, California. These schools are examples of what makes schools powerful places for students' learning. Finally, this session shows how teachers can work together, either with a few colleagues or an entire faculty, to look at learning together and bring what they know about student learning to bear on the curriculum.

Teaching and Learning for Understanding

Teaching for understanding means teaching "all students, not just a few, to understand ideas deeply and perform proficiently" (Darling-Hammond, 1997, p. 5). Schools that foster such learning are designed to build on what we know about how children learn. Taken together, the principles of learning theory create a school culture that supports learning in everything the school does.

Schools that organize the whole curriculum around practices that enhance learning obtain extraordinary outcomes because they are working with the way people learn rather than against it. Small, communally organized high schools that have redesigned themselves for powerful learning report improved student outcomes such as school attendance, grades, skills, graduation rates, and post-graduation activities (Visher, Emanuel, & Teitelbaum, 1999). High school students who experience "authentic instruction," engaging in "active learning in real-world contexts" achieve greater results in "complex performance tasks" and also do better on conventional tests (Lee, Smith, & Croninger, 1995; Newmann, Marks, & Gamoran, 1996).

II. Session Overview, cont'd.

However, changing only one aspect of schooling, as many reforms often do, will not be enough. All the many dimensions of sound learning theory have to come together in classrooms and schools to mutually ensure students' learning. For example, if teachers switch to authentic assessment and begin to require student portfolios but do not have a curriculum that supports the kind of ongoing revision that is necessary, that provides students with opportunities for assisted performance, and that scaffolds the learning, the assessments will not improve learning. To do those things, teachers also have to have a supportive schedule and curriculum and a view of what is going on throughout the school that supports children's development, that sets appropriate expectations, and that motivates students to want to learn and succeed.

The learning theories in this course are interrelated—emotions underlie motivation; metacognition is essential to becoming expert processors and problem-solvers; the structure of the discipline affects how tasks are selected and scaffolding is developed; cultural differences affect the knowledge we transfer into a task. All these pieces of the learning puzzle have to come together and intersect if powerful learning is to occur. These learning theories do not stand in isolation. They look at different aspects of the learning puzzle, serving as a prism that allows us to look through different lenses and see other dimensions each time.

The application of the learning principles needs to be coherent across the school. Moreover, teachers need to work with all of the learning principles at the same time. Schools that have reorganized themselves around how people learn have done so to enhance learning in three central ways addressed by this course:

Supporting the growth and development of the individual learner—This set of principles takes into account how students develop, process information, and use their multiple intelligences. Supporting the individual learner requires teaching in developmentally appropriate ways, engaging learners' interests, and connecting to their prior knowledge, experiences, and ideas. It involves engaging students in a wide variety of activities to allow them to find their developmental level of performance and use their different intelligences. It includes giving students opportunities to make explicit their current knowledge and strategies and to introduce them to new strategies by modeling how experts think and approach problems.

Creating a positive, productive environment for learning—This set of principles includes constructing a nurturing environment that supports the social and emotional growth of students and connects to students' cultural backgrounds, communities, and families. Positive learning environments take into account how students' feelings affect their processing of information and their understanding. Such environments use the social group—both teachers and peers—as sources for learning, as well as other parts of the environment (e.g., school resources, home resources, natural resources). They strive to make cultural connections for the students around things that are relevant and meaningful to them. Such environments thus enable teaching for diversity—teaching "in ways that help different kinds of learners find productive paths to knowledge as they also learn to live constructively together" (Darling-Hammond, 1997, p. 5).

Organizing the curriculum content for students to master—This set of principles suggests that teachers must make deliberate choices about the curriculum so that the content is important, engaging, and accessible. These principles point to the importance of the major concepts and modes of inquiry that guide experts in each field; that is, what it means to think like a mathematician, a scientist, a writer, or a historian. Organizing content involves using the structure of the disciplines to make decisions about curriculum and instruction. It also includes the idea of cognitive apprenticeship, through which teachers support the process of learning to think, just as masters guided their apprentices in learning their trades. It refers to how teachers scaffold the learning process and provide assistance through cognitive apprenticeships that get at the core ideas of the disciplines. Organizing the content includes helping students to think metacognitively by teaching them to reflect on their own thinking and guide their own learning. It means constructing tasks so that students will be able to transfer their learning, to apply the knowledge and skills that are learned in one setting in other situations. Classrooms that are organized around learning principles ask students to transfer ideas across the disciplines, to share information and ideas within a community of learners, and to teach others as a means of deepening their own understanding (Perkins, 1998). Such classrooms are consciously constructed to ensure that learners are able to master the content and develop the skills they will need in life.

II. Session Overview, cont'd.

When teachers take into account these three components of learning for teaching—the individual learner, creation of a nurturing environment, and organization of content so that it is important, engaging, and accessible—students are motivated. Motivation cuts across all the learning themes in this course. Students are motivated when tasks are made interesting and exciting because they are authentic and relevant, when feedback and assistance help them develop competence, when numerous opportunities are provided to engage work that is within their zone of proximal development (ZPD), and when significant opportunities to revise with support are provided. Together, these aspects of teaching help students become competent learners, which serves to motivate them.

The learning theories presented in this course also come into fruition through the implementation of certain organizational strategies. All of the topics in this course have implications for the organizational supports or structural features of schools needed to support learning.

Structural Features of Schools That Support Learning

To organize schools that support students' learning for understanding, it is important to use a coherent, connected approach to teaching and learning that is reinforced and supported by the structural features of school design. School features that support powerful learning include:

> [A]ctive in-depth learning, emphasis on authentic performance, attention to development, appreciation for diversity, opportunities for collaborative learning, a collective perspective across the school, structures for caring, support for democratic learning, [and] connections to family and community (Darling-Hammond, 1997, p. 331).

These are the organizational tools that bring learning theory into practice in a school setting. In *The Right to Learn*, Darling-Hammond describes these features found in successful schools:

Active in-depth learning—Active in-depth learning "begins with the disciplines" and "engages students in *doing* the work of writers, scientists, mathematicians, musicians, sculptors, and critics" (Darling-Hammond, 1997, pp. 107-108). Learning tasks are real performances based on the concept that "I do and I understand." Teachers build on students' prior learning, and students use higher-order cognitive skills to apply ideas to meaningful activities. Students' learning is designed to enable them to transfer ideas to novel situations and contexts, and to make connections across different situations. Teachers use principles of cognitive apprenticeship—modeling, scaffolding, coaching, and fading or descaffolding—to foster in-depth learning.

Emphasis on authentic performance—Curriculum and assessment are integrated around meaningful performances in real-world contexts. Performance-based assessments use multiple criteria to determine *how* students are thinking and learning, as well as *what* they know and can do. Performance tasks are central to the work of the disciplines and are selected to represent the big ideas and modes of inquiry in each subject area. For example, performance assessments in science include designing, conducting, evaluating, and representing a scientific experiment as the core mode of discovery in the discipline. Students learn how to reflect on their own performance, how to evaluate it against a standard, and how to apply what they are learning to real-life situations. Students are motivated by opportunities to perfect their work and succeed in meaningful tasks. These carefully selected tasks that result in public performances structure the overall curriculum of the school (Darling-Hammond, Ancess, & Falk, 1995).

Attention to development—Teaching and learning are informed by knowledge about learning and development. Teachers observe children carefully and design their instruction so that it is appropriate for the students' stages of growth and ZPDs. Schools are organized to support students' physical, cognitive, social, emotional, and moral development. Instruction considers students' prior knowledge and developmental signs of readiness, *and* helps them to become more ready for new accomplishments in each domain of development.

II. Session Overview, cont'd.

Appreciation for diversity—Successful schools organize curriculum and teaching to embrace students' differences as opportunities for sharing student expertise and learning from one another. Teachers connect the curriculum to learners' experiences, differing strengths and intelligences, and frames of reference. Schools recognize and affirm students' cultures and "funds of knowledge" while also moving students toward mainstream competencies.

Opportunities for collaborative learning—Classrooms are organized for students' participation in a "learning community." Successful schools support Vygotsky's notion that learning takes place in a social context and relies on communication and interaction with others. Classrooms are designed to foster communities of discourse that make students' and teachers' thinking visible. Individual and collective learning is encouraged as teachers and expert peers assist students in reaching their potential developmental levels. The classroom environment encourages students' motivation by minimizing comparison, and by providing opportunities for risk-taking and improvement over time.

Collective perspective across the school—Successful schools have common goals, a shared ethos, and common norms of instruction. Rather than students encountering a fragmented curriculum and different expectations in each classroom, restructured schools collectively plan for students' learning goals, including how they will be achieved and assessed. When objectives are reinforced throughout the school and curriculum is more coherent, the total learning is much more powerful than when it is fragmented or inconsistent. Teachers work collaboratively to develop instruction that reflects the central concepts and ideas in the disciplines. Teachers "go meta" in their own practice to reflect on their successes and struggles, support their colleagues' teaching, and direct their own learning.

Structures for caring—The school structure enables teachers and students to develop relationships based on mutual trust, respect, and thoughtfulness. Teachers and students develop strong, ongoing relationships as they spend extended time together—often two full years—within small school units and teams. Students' success depends in part on teachers' keen knowledge of their learning styles and skills, enabled by small pupil loads, advisories, and other means for close encounters. Teachers provide an emotionally safe and responsive learning environment and teach the skills of emotional intelligence, including self-awareness, managing emotions, motivation, empathy, and handling social relationships (Goleman, 1995).

Support for democratic learning—Successful schools prepare students for active participation in a democratic society by engaging them in shared decision-making and respectful debate and discourse about matters that are important to the members of the community. Such preparation both motivates and educates students. Such schools also support students' equal access to knowledge, democratic communication, and active participation in social dialogue.

Connections to family and community—Successful schools build connections to students' families and communities. This enables teachers to learn about students' cultures and interests and to learn from parents about their children's experiences and strategies for learning. This understanding allows teachers to build on the family's assets and funds of knowledge. Teachers apply culturally relevant and equity-oriented classroom practices that help students transfer what they have learned in school to their home and community (Darling-Hammond, 1997, pp. 107-146).

All of these structural features work together to create teaching and learning for understanding. Most important for overall school success is that schoolwide goals need to be shared. These goals should be informed by a common understanding of what constitutes important learning and high-quality work. This means that faculty must be involved in continuous conversation about how the learning experiences support student development and about how to structure active learning around the central ideas and modes of inquiry within and across the disciplines. Faculty also need to be involved in conversations about assessment that lead to performances of understanding that reflect the ways in which knowledge is used in the world outside of school. Teachers need regular opportunities to collaborate in their planning and in their work with students in order to create these shared goals and put them into practice. Teachers also need time to support collaboration with students' families.

II. Session Overview, cont'd.

School-Wide Reform Requires Institutional Support of Teachers' Collaborative Practice

Collaboration among teachers is a critical key to school reform—both within and across schools (Barth, 1990; Darling-Hammond, 1997; Lieberman, 1995; Tharp & Gallimore, 1988; Wells, 1994). Teachers can work together either with a few colleagues or an entire faculty to look at learning together and to bring what they know about student learning to bear on the curriculum. Teachers can also collaborate to design entire learning environments, and to support one another in improving their own teaching. Structured time for collaboration gives teachers time to study their own and each other's "best practices" (Little, 1999).

Institutional support of teachers' collaboration is essential. Schools may initiate a daily "common planning time" for teachers to work in teams to increase their opportunities for professional interaction. Research shows that such attention to individual student talents, interests, and needs and connections to the home results in higher student achievement (Visher, Emanuel, & Teitelbaum, 1999). The teaching teams with shared planning time at both East Palo Alto High School and Birmingham Covington School (schools featured in this session's video) support teachers' practice and collaboration. These schools, like others, also provide for teachers' ongoing professional development through course offerings at local partner universities, summer workshops, and mentoring of beginning teachers (Darling-Hammond, 1994; Lieberman & Miller, 2001; Tharp, Estrada, Dalton, & Yamauchi, 2000).

Teachers can collaborate to *design learning environments.* Learning theory can inform both classroom and school design. John Bransford and colleagues (2000) suggest that learning is enhanced in different ways when learning environments are *student-centered, knowledge-centered, assessment-centered,* and *community-centered.* Each of these lenses on the learning environment influences "what is taught, how it is taught, and how it is assessed" (Bransford, Brown, & Cocking, 2000, p. 131.) As teachers design the work that goes on within and across classrooms, they might ask, "What do students bring in terms of their experience and knowledge and what do they need?" "How am I drawing on students' interests and strengths?" (learner-centered); "What kind of knowledge am I trying to develop?" (knowledge-centered); "What kinds of assessments will help me know what students understand and how they learn?" (assessment-centered); and "How can I construct a community of learners in the classroom—and beyond—to support students' learning?" (community-centered). These questions can be used for teachers to consider their practice individually or with others. These questions can also become the tools to integrate ideas about learning theory that inform broader school change.

Teachers can *focus on student learning* by collectively mapping curriculum and conceptualizing learning experiences. Grant Wiggins and Jay McTighe (1998) suggest a strategy to map curriculum through a "backward design process" by starting with the end, or the "desired results," in mind. Their key design questions are "What is worthy of understanding? What is evidence of understanding? What learning experiences and teaching promote understanding, interest, and excellence?" (Wiggins & McTighe, 1998, p. 18). Teachers can use this approach to plan instructional activities as well as school-wide interdisciplinary themes and performance assessments.

Teachers can *focus on student learning* by creating assessments together, designing rubrics together for exhibitions or projects, observing one another's students, giving feedback to students across classes, and taking time to analyze student work together to examine what has been learned and consider where to go next. When teachers look at student work "together," they bring a variety of perspectives to student assessment. Because student work is "the product not only of the child but of the alchemy of teacher, student, and object of study" (Seidel, 1998, p. 88), systematic study of such work can result in the redesign of teaching and curriculum as well as supports for individual students. Institutional support for teachers to engage in such study might include exhibitions or portfolio conferences evaluated by panels of teaching study groups that bring work samples for evaluation and discussion, and workshops for teachers to learn and share ideas about authentic assessments of student learning.

Finally, teachers can use collaboration as a tool to *reflect on and look at their own teaching.* Institutional support for teachers to reflect on "best practices" might include lessons taught by colleagues for teachers to observe and reflect on. The "lesson study," for instance, is a technique used in Japan where teachers observe a model lesson and then reflect on the lesson and students' reactions to it (Watanabe, 2002). Institutional support might also include time for peer coaching so that teachers can see each other and can get feedback on their practice.

II. Session Overview, cont'd.

What Makes Schools Powerful

The two schools that are featured in this session, **Birmingham Covington School** in Bloomfield Hills, Michigan, and **East Palo Alto High School** in East Palo Alto, California were both explicitly designed to capitalize on what we have come to know about the learning of both students and teachers. Each school integrates important structural features of environments that support teaching and learning for understanding across grade levels and disciplines (Darling-Hammond, 1997).

Birmingham Covington School (BCS) is a public, district-wide third- through eighth-grade school, with 600 students. Classes at BCS are organized into multi-grade developmental learning levels and days are organized with block scheduling. Students remain with core teachers for two years to give teachers time to get to know their students, understand where there students are developmentally, and design instruction to match their students' interests (BCS brochure, 2002). The block scheduling also provides teachers 200 minutes of team planning time a week; teacher collaboration is a primary key to BCS's success. BCS is a school focused on science and technology; teachers create developmentally appropriate curriculum around the themes of systems and patterns (third and fourth grades), interdependence and independence (fifth and sixth grades), and individuality and diversity (seventh and eighth grades). [BCS is also featured in the Session 2 video, Development and Learning, and the Session 8 video, Cognitive Apprenticeship.]

Taking a closer look at BCS, you will notice that BCS uses an interdisciplinary approach to instruction—art, literature, technology, and science are taught in an integrated manner. Interdisciplinary projects are the basis for cognitive apprenticeships that carefully scaffold students' learning on authentic tasks. Each classroom is engaged in project-based learning around modes of science inquiry reflecting Dewey's (1902) ideas about active learning, driven by students' own questions. For example, fifth- and sixth-grade students' questions probe the themes of What is a system? How does it relate to the world? Where do you fall into the scheme of things in terms of independence and interdependence? (BCS brochure, 2000 p. 3) Teachers have selected and organized projects across grade levels around the core ideas in the discipline of science. They apply Bruner's (1960) notion of a "spiral curriculum" when they revisit these same central ideas across different grade levels. Tasks are engaging because they are based 0n students' own questions and relevant to their own lives.

A visitor to BCS would see teachers organizing study groups to be productive "learning communities," where students learn from other student and community experts as well as from staff experts. Older students mentor younger students in reading, writing, and technology. Students are given substantial feedback; they are offered many ways to revise their work with support, which helps them feel like competent learners and motivates them. At the end of each interdisciplinary unit students are evaluated based on a product or performance supported by technology. Students link their classroom learning to the outside world and develop the knowledge and skills that will support them in their future high school studies (BCS brochure, 2000).

East Palo Alto High School (EPAHS) is a new, small, charter public high school, which opened in 2001 with 80 ninth-grade students and plans to eventually serve about 320 students in ninth through 12th grades. EPAHS is the first public high school in its community in more than 25 years. The school addresses the educational needs of low-income, urban youth, two-thirds of whom had previously failed to graduate in the high schools to which they had been bussed. The goals of the school were developed by the faculty, who state, "Students will graduate from East Palo Alto High School with the ability to access, use and analyze information, produce new knowledge, and respond critically and thoughtfully" (Faculty of East Palo Alto High School, 2000). [EPAHS is also featured in the Session 6 video, Culture and Learning.]

Like BCS, teachers at EPAHS engage in joint project planning and work closely with students for two years. During a faculty meeting, you will see teachers defining the classroom norms and goals, planning learning activities around students' interests, and learning goals and performance assessments. School-wide learning objectives are reinforced through high academic standards and expectations, a student portfolio system, and a shared rubric for assessing students' knowledge, competencies, and community activities. EPAHS teachers develop curricula based on assessment projects, including papers, exhibits, and presentations. The EPAHS rubric system reflects the students' learning by providing them with specific feedback on their strengths and weaknesses in the following areas: "personal responsibility, social responsibility, critical and creative thinking, application of knowledge, and communication" (Faculty of EPAHS, 2000, p. 2).

II. Session Overview, cont'd.

This authentic, performance-based assessment of student learning helps establish communication and a partnership between home and school. During teacher-parent conferences, for example, students lead the parents through evidence of their learning experiences, interests, and achievements. Parents contribute "funds of knowledge" from the schools' community; they serve as additional resources during student-led "personal learning plan" conferences with teachers. At EPAHS, students also engage in community service projects in local businesses and organizations that forge connections among school, parents, and community. Students combine such real-world learning experiences with their classroom learning. At EPAHS, it is clear that the community belongs to the school and the school belongs to the community.

Conclusion

Changing just one aspect of schooling will not lead to powerful student learning. All the pieces have to come together in a mutually reinforcing way. For example, appreciation for diversity and strong relationships with family and community need to be supported by structures for caring that put teachers and students together in small groups that stay together for extended periods of time. For students to succeed, the curriculum needs to build the necessary scaffolding, give students opportunities for assisted performance and support the ongoing revision that enables growing competence. And to create curriculum that supports the high standards embedded in a rigorous performance assessment, teachers also have to build classrooms and school environments that take children's development into account, provide appropriate expectations for them, and give them support in their development. Schools that have organized everything they do around what enhances learning achieve extraordinary outcomes in large part because they are working *with* the way people learn and making every classroom a learning classroom.

III. Additional Session Readings

Bransford, J. D., Brown, A. L. & Cocking, R. R. (Eds.). (2000). The design of learning environments (Chapter 6). In *How people learn: Brain, mind, experience, and school.* Washington, DC: National Academy Press. [Online]. Available: http://books.nap.edu/html/howpeople1.

Blair, L. (2000, April). Creating a context conducive to change. *Connections,* 1(2), pp. 1-3. [Online]. Available: http://www.sedl.org/csrd/connections/april2000/4.html.

Comer, J. (2001, April). Schools that develop children. In *The American Prospect,* 12(7) pp. 30-35). [Online]. Available from the American Prospect Web site: http://www.prospect.org/print-friendly/print/V12/7/comer-j.html.

IV. Session Activities

Getting Started

Answer the following question in a free-write, pair-share, or small-group discussion.

You have just been elected to design a new school for your community because of your expertise about learning and your ability to think "outside the box." You will need to consider some of the following aspects: curriculum, assessment, school organization, governance, and professional development.

• What kind of school would you design? Be specific. Identify structures and features of this new school that would support teaching and learning for understanding for all students and for all teachers.

Discussion of Session Readings

To the Facilitator: You may want to select questions from the Other Learning Activities and Assessments section to launch a discussion of the session readings. The questions used for the Checking for Understanding activities may be a particularly helpful resource.

Session Video

This concluding video features two schools that have organized themselves to focus on all of these aspects of learning. In both schools, the staff works as a team, and the involvement of students and parents ensures that every classroom is a learning classroom.

Background on Schools

The first of these schools is **Birmingham Covington School** in Bloomfield Hills, Michigan. Seven years ago, BCS restructured itself and became a public school of choice serving third through eighth graders who apply for admission and are selected in a districtwide lottery. Students learn in an interactive atmosphere where they integrate and apply their knowledge. Through interdisciplinary projects, they demonstrate their understanding of skills and concepts. Students also use technology in performance-based assessments as they link their classroom learning to the outside world.

The second school featured in this video is **East Palo Alto High School** (EPAHS), which serves students from East Palo Alto, California, a new school founded in a community that had not had its own high school for 25 years. As at BCS, faculty teams work closely with small groups of students whom they teach for two years. The curriculum is project-based and is guided by learning standards and portfolio assessments. Faculty members collectively discuss students' learning goals, instructional activities, and performance assessments, and they provide additional supports to ensure that every student can meet the standards.

IV. Session Activities, cont'd.

Discussion of Session Video

> **To the Facilitator:** You may want to pause the tape at the following points to discuss these questions. If you are watching a real-time broadcast on the Annenberg/CPB Channel, you may want to consider the questions as you watch and discuss some of them afterward.

1. Birmingham Covington School, Bloomfield Hills, Michigan (BCS)

Video Cue: *The Learning Classroom* icon fades out at approximately 14:30 into the program.

Audio Cue: Dale Truding, Principal of BCS, says, "And when you use authentic assessment and when you give kids choices in the products or performances that they create, you're really able to take kids from where they are, make accommodations and move them forward." Students say in unison, "Three, two, one ..." Teacher says, "Whoa! Heads up!" <laughter>

2. East Palo Alto High School in East Palo Alto, California (EPAHS)

Video Cue: *The Learning Classroom* icon fades out at approximately 26:15 into the program.

Audio Cue: Rebecca Padnos Altamirano, teacher for EPAHS, says, "It's exciting to be a part of this and to have the opportunities. When I look into what the classrooms were like the first few weeks and where they are now, it's just huge, huge progress." Eduardo Torres, ninth-grade student at EPAHS, says, "Our cries of happiness have become cries of death. I'm a Salvadorian and I have a bit of all." <applause>

Creating Classrooms and Schools That Support Powerful Learning (BCS and EPAHS)

- What do you notice in these video segments that reflect the following course themes?

    - Understanding students and their development,

    - Building a positive, productive environment for learning,

    - Teaching content and skills students will need in life,

    - Motivating students, and

    - Creating a school culture that supports learning in everything the school does.

Understanding Students and Their Development (BCS and EPAHS)

- What do these schools do to support individual learners and the way they develop, think, and learn?

    - How does your school support the individual learner and the way he or she develops, thinks, and learns?

    - Are there things you would change in your school to better support individual learners?

Building a Positive, Production Environment for Learning (BCS and EPAHS)

- What do these schools do to create a connected, nurturing environment that supports students' social and emotional growth, connects to their cultural background and experience, and draws in family and community?

    - How does your school create a connected, nurturing environment that supports students' social and emotional growth, connects to their cultural background and experience, and draws in family and community?

    - Are there other things you would like to see your school consider doing?

IV. Session Activities, cont'd.

Teaching Content and Skills Students Will Need in Life (BCS and EPAHS)
- What do these schools do to organize content so that students can access knowledge and develop skills?
  - How does your school organize content so that students can access knowledge and develop skills?
  - Are there other things you would like to see your school consider in this regard?

Motivating Students and Creating a School Culture That Supports Learning (BCS and EPAHS)
- What do these schools do to motivate students to learn for understanding?
- How do they create a school culture that supports learning?
- What does your school do to support motivation and create a learning culture?

V. Other Learning Activities and Assessments

> **To the Facilitator:** These activities and assessments are for you to choose from according to your group's needs and interests. Many of the activities offered here would work equally well as assignments both inside and outside of class. You may want to use class time to prepare for and/or reflect on any activities assigned as homework.

Applications

1. Journal
Fill in the blank: If I could change one aspect of my classroom or my school so that more students would learn more deeply, it would be _____. Explain.

V. Other Learning Activities and Assessments, cont'd.

2. Analysis of Teaching

Write a brief (two- to three-page) analysis of one of the schools in this video from the perspective of the four lenses presented in Bransford et al., Chapter 6: learner-centered, knowledge-centered, assessment-centered, and community-centered.

- In what ways do the teachers in this school:

    - Engage *learners'* interests and connect to their prior knowledge, experiences, and ideas;

    - Organize the *knowledge* to be acquired so that it is accessible;

    - *Assess* what the students know and are learning; and

    - Construct a *community* in the classroom?

- Evaluate the ways in which teachers scaffold the learning process. What specific steps do teachers take to ensure that learners are able to understand the material to be learned?

3. Thinking About Your School Using Nine Key Features of Environments That Support Teaching and Learning for Understanding

In small groups, consider at least three of these features of successful schools in relation to the schools where you teach. Discuss evidence of how your school supports this feature, and consider additional ways in which you might strengthen this feature through specific changes in school practices and/or structures.

- Active in-depth learning

- Emphasis on authentic performance

- Attention to development

- Appreciation for diversity

- Opportunities for collaborative learning

- Collective perspective across the school

- Structures for caring

- Support for democratic learning

- Connections to family and community

To the Facilitator: Consider the variety of school organizations represented in your class in order to group learners and to assign one of the nine structural features of classrooms and schools to each group. It might benefit learners to hear particular examples from their classmates. All features should be represented by the whole class's work.

Remind learners to consider how schools depicted in the video segment address this feature.

Have groups report on their discussions. Possible probing and debrief questions include:

- What do you do already that addresses this feature?

- What kind of professional development would you need or want to make this happen?

- What concerns do you have?

- What are some possible next steps to make these ideas a reality?

V. Other Learning Activities and Assessments, cont'd.

4. Create an Action Plan

Select one of the following "key course questions" that this course emphasizes as a lens for examining student learning in your classroom and/or school environment:

> **To the Facilitator:** Learners may apply ideas from this course either to their classroom or to their school environment as a whole.

- How can I support my students' development?

- How can my teaching and classroom environment support learning for understanding?

- How can I organize the curriculum for powerful, transferable learning?

- How can interactions among the learner, the classroom environment, and the teaching/learning process produce motivation to learn and build strong learning communities?

Write three steps that you can take to build a more powerful learning environment for your students with respect to this particular feature.

Checking for Understanding

1. Short-Answer Questions

a. What does "teaching and learning for understanding" mean? How does it differ from other kinds of teaching?

b. What are some characteristics of schools that support teaching and learning for understanding?

2. Essay Questions

a. Select one structural feature you read about in this session, or elsewhere, and discuss why your school should consider working on this aspect of the school. Your arguments should focus on how doing this will enhance student learning.

b. The authors of this chapter argue that we need integrated school-wide reform to teach for understanding and diversity. According to their argument, why is this necessary? Do you agree with this argument? Why or why not?

3. Reflective Essay

Do you agree that designing schools and classrooms for more powerful learning is fundamentally a democratic endeavor? If so, why? If not, why not?

Long-Term Assignments

Curriculum Case Study

If you are doing the long-term curriculum case, you may engage in the final steps of finishing your curriculum case, possibly participating in a case conference or writing a final draft.

> **To the Facilitator:** You will find other learning activities on the course Web site at www.learner.org/channel/courses/learning-classroom. You will want to look ahead to assign learners the reading and any homework for the next session.

VI. Web Sites and Organizations

Annenberg Institute for School Reform: http://www.annenberginstitute.org/

The Annenberg Institute for School Reform (AISR), at Brown University, focuses on improving the conditions of schooling in America, especially in urban communities and schools serving disadvantaged children. AISR is involved with a number of initiatives in professional development, leadership, accountability, and school reform

The Coalition of Essential Schools: http://www.essentialschools.org/

The Coalition of Essential Schools is a network of national schools committed to student achievement though school redesign, classroom practice, achievement, and community involvement.

Comer School Development Program: http://info.med.yale.edu/comer/

The Comer School Development Program, at Yale University Child Study Center, supports teachers and schools as they organize their schools for the healthy development of children. This Web site provides background on the "Comer process," as well as research related to the School Development Program.

National Center for Restructuring Education, Schools, and Teaching: http://www.tc.columbia.edu/~ncrest/

The National Center for Restructuring Education, Schools, and Teaching (NCREST) is located at Teachers College, Columbia University. The Center supports school reform efforts and helps schools become learner-centered by focusing on the needs of learners, by supporting the restructuring of professional development, and by developing accountability and assessment practices.

New American Schools: http://www.naschools.org/

New American Schools is a research-based organization that helps schools with systemic and comprehensive school reform by working with the entire school community—educators, students, parents, administrators, researchers, and business leaders.

VII. References and Recommended Readings

Note that recommended readings are marked with an asterisk (*).

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Notes