The Learning Classroom: Theory Into Practice

A 13-part video- and Web-based course for teacher education and professional development

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The Learning Classroom: Theory Into Practice

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Acknowledgments

The Learning Classroom: Theory Into Practice is based on a number of resources. Key among them is a preservice teacher education course entitled “Principles of Learning for Teaching.” Lee S. Shulman, President of the Carnegie Foundation for the Advancement of Teaching and former professor at Stanford University, developed the course with Linda Darling-Hammond, professor at Stanford, and Karen Hammerness, post-doctoral fellow at Stanford. A course on learning theory developed by John Bransford, professor at Vanderbilt University, has also been consulted. A key resource was the National Research Council publication, How People Learn: Brain, Mind, Experience, and School (2000), edited by John Bransford, Ann Brown, and Rodney Cocking. It is available online at http://books.nap.edu/html/howpeople1.

We would like to thank the members of our Advisory Board for their valuable insights and feedback as we developed the course. They include John Bransford, Ph.D., Centennial Professor of Psychology and Education and Co-Director, Learning Technology Center at Vanderbilt University; Helen Featherstone, Ed.D., Associate Professor of Teacher Education, Michigan State University; Sharon Feiman-Nemser, Ph.D., Mandel Professor of Jewish Education, Brandeis University; Elizabeth Kirsch, Ph.D., Assistant Professor of Interdisciplinary Early Childhood Education, University of Louisville; Kay Lovelace-Taylor, Ed.D., President, Kay Lovelace-Taylor and Associates; Richard Navarro, Ed.D., Dean of Education and Integrative Studies, California State University at Pomona; John Porter, Ph.D., CEO Urban Education Alliance, Inc., and President Emeritus, Eastern Michigan University; Lee Shulman, Ph.D., President, Carnegie Foundation for the Advancement of Teaching; and Dennis Sparks, Ph.D., Executive Director, National Staff Development Council.

We also thank the research experts who provided on-camera commentary for the programs. We appreciate the opportunity to interview them about their work and how learning theories apply to the specific classrooms we videotaped. They are identified in the Who's Who section of About This Course.

We are most grateful to the on-camera teaching experts who allowed us to videotape them in their classrooms. They are also identified in the Who's Who section of About This Course. We asked a lot from them, and then often asked for even more as we followed up with additional tapings, interviews, or more questions. The students, parents, and administrators at these schools also deserve recognition for their tremendous cooperation.

We want to thank Linda Darling-Hammond, Ed.D., Charles E. Ducommun Professor of Education at Stanford University, for providing great academic leadership while we created our own “learning community” to develop the course materials. Professor Darling-Hammond’s brief biography is in the Who’s Who section of About This Course. Linda and the team of authors, editors, producers, and others had to learn a lot from each other in a very short time in order to succeed—and succeed they did. Everyone who researched, wrote, produced, videotaped, recorded, and edited made important contributions. You will find them acknowledged in Appendix A, Course Development and Production Credits.

Bob Rossbach
Project Director
Detroit, Michigan
February 2003
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About This Course

*The Learning Classroom: Theory Into Practice* has been prepared as a resource for university courses and professional workshops for a diverse learner audience of college students, preservice teachers, and inservice teachers.

The course has been designed to be flexible to allow for use in different contexts. College or university faculty can teach this course to preservice teachers. Inservice workshop leaders or professional development staff can use the course for teacher professional development. Teachers and principals can use the course as a resource for school study teams or other faculty development activities. Instructors can also teach this course to students in distance-learning environments where learning and teaching interactions take place via broadcast and electronic media.

Terminology Used in This Course

The terminology can become very confusing when referring to teachers who are in the role of students in a class. In this guide, we refer to the people leading a group of learners taking the course as leaders, faculty, instructors, or facilitators. The terms are used interchangeably. Learners who are taking this course are referred to as learners, participants, and teachers. The term students is reserved for K-12 students—not persons taking this course.

Key Course Questions

*The Learning Classroom: Theory Into Practice* focuses around four essential questions:

1. How do people learn and develop?
2. How can my teaching and classroom environment support learning for understanding?
3. How can learning theory inform my teaching practice?
4. How can interactions among the learner, the classroom environment, and the teaching/learning process produce motivation to learn and build strong learning communities?

These questions are a foundation for teachers to explore learning theories, examine their own teaching, and discuss applications for classroom practice. The first sessions (1-4) look at students as learners: how they develop, process information, and use their multiple intelligences. The second group of sessions (5-7) looks at how teachers construct a positive, productive environment for learning. The third group of sessions (8-11) focuses on how to help students master content and develop the skills they will need in life. The final two sessions (12-13) focus on motivating students and creating a school culture that supports learning in everything the school does.

Overview of the Course: Session Topics

Each session of this guide presents one aspect of the learning process within a larger body of learning theory. Each session is designed to build on the previous ones in order to demonstrate the spectrum and the interconnectedness of the individual theories. Instructors and course participants will explore 13 areas of the learning process and related teaching practices.

**Session 1. How People Learn: Introduction to Learning Theory**

*Introduction to Learning Theory* briefly introduces the history of learning theory. It describes the learning process as we understand it today, and the ways teaching practices can build on these understandings. This session also discusses the relationship of theory to practice and the teacher’s role as theorist.
Session 2. Learning As We Grow: Development and Learning

Development and Learning describes learning as a developmental process and development as a learning process. This session describes developmental pathways and stages through which students progress at different rates. It presents Jean Piaget's theory of cognitive development, as well as the ideas of subsequent theorists who expanded on Piaget's work by emphasizing the role of the environment in human development and learning. Developmental theory includes the concept of readiness for learning, which provides insights into what, when, and how to teach.

Session 3. Building on What We Know: Cognitive Processing

Cognitive Processing describes how people perceive and process information. This session briefly discusses the role of the brain and of experience in learning, and then describes in more depth how we process, organize, and remember what we learn. The session explores the role of prior knowledge—conceptions, misconceptions, and associations—and examines how our expectations and ability to make connections affect learning.

Session 4. Different Kinds of Smart: Multiple Intelligences

Multiple Intelligences describes how people rely on diverse abilities in their learning and demonstrate their learning in different ways. It presents Howard Gardner's theory of multiple intelligences—a theory based on the notion that most individuals possess a number of independent intelligences that operate together to enable them to solve problems and create culturally valued products. The session provides insights into how teachers can use students' intelligences as pathways to successful learning.

Session 5. Feelings Count: Emotions and Learning

Emotions and Learning examines how emotions influence cognitive processing and describes how learning to manage feelings and relationships develops “emotional intelligence.” This session illustrates how to create an emotionally safe learning environment and how to help students learn to manage their emotions.

Session 6. The Classroom Mosaic: Culture and Learning

Culture and Learning emphasizes that all learning takes place in a cultural context. It explores how and why differences in culture matter in the educational process, and how teachers and students can understand, embrace, and capitalize on diverse perspectives and experiences. It discusses how culturally responsive teaching taps into students' experiences and creates cultural congruity between home and school.

Session 7. Learning From Others: Learning in a Social Context

Learning in a Social Context discusses how learning relies on communication and interaction with others and describes how learning can be assisted by others. It is based on Lev Vygotsky's theory of learning as a socially interactive process. This session describes how classroom “learning communities” can support learning through assisted performance, managed discourse, and reciprocal teaching.

Session 8. Watch It, Do It, Know It: Cognitive Apprenticeship

Cognitive Apprenticeship discusses how teachers can facilitate learning by making expert thinking visible to students as traditional apprenticeships did in coaching novices in learning trades. The session discusses how complex performances are learned through modeling, demonstrating, scaffolding, and coaching. It describes how teachers can construct tasks, structure the learning environment, and create opportunities for assessment and constructive feedback in order to support high levels of learning.

Session 9. Thinking About Thinking: Metacognition

Metacognition discusses how metacognition enables students to better manage their learning process and to learn difficult concepts deeply. This session introduces how reflective skills can be taught and how self-regulating strategies such as planning, predicting, organizing, and reflecting can be developed.
Session 10. How We Organize Knowledge: The Structure of the Disciplines

The Structure of the Disciplines discusses how disciplines organize knowledge and use different modes of inquiry to develop understanding. It discusses how teachers can support student learning by helping them understand the big ideas within a domain and how they are connected. The notion of “pedagogical content knowledge”—how teachers combine knowledge of subject matter with knowledge of students—is introduced.

Session 11. Lessons for Life: Learning and Transfer

Learning and Transfer describes what conditions are needed for knowledge and skills learned in one context to be retrieved and applied to new situations. The session explains how different teaching strategies can support the transfer of knowledge into and out of different contexts.

Session 12. Expectations for Success: Motivation and Learning

Motivation and Learning describes how students’ expectations about their competence, as well as the tasks teachers set, affect their willingness to engage in learning. The session discusses how classrooms can be designed to enhance students’ motivation to learn.

Session 13. Pulling It All Together: Creating Classrooms and Schools That Support Learning

Creating Classrooms and Schools That Support Learning describes how schools can organize for student success by pulling together all the elements of learning theory, and creating a coherent, connected approach to teaching and learning that is reinforced and supported by structural features. Those supports include school-wide goals and standards, curricula that structures active learning around central disciplinary ideas and modes of inquiry, authentic performance-based assessment, and teacher collaboration in planning and working with students.

Course Components

The three components of the course—13 half-hour video programs, this guide, and a Web site—are to be used together. The course guide is designed to integrate these three components for the course faculty and group facilitators.

The Video Programs

The 30-minute video programs present teachers actively using learning theory in their own practice. The primary advisor to the course is Linda Darling-Hammond, Charles E. Ducommun Professor of Education at Stanford University. Professor Darling-Hammond hosts the programs and provides brief introductions to the documentary-style segments for each session. Each program generally includes one vignette taped in an elementary school classroom and one taped in a middle or high school classroom that illustrate the main ideas of the session. Experts including James P. Comer, David Elkind, Howard Gardner, Daniel Goleman, Gloria Ladson-Billings, Luis Moll, Annmarie Sullivan Palincsar, Roy Pea, Lee S. Shulman, Deborah Stipek, and Roland Tharp provide commentary on the segments. The programs provide thought-provoking examples of real classrooms, and they are equipped with “video pause points”—identified in this guide and by an icon on the video screen—that enable the instructor or group leader to stop and engage the learners in discussion. These questions highlight the key ideas and teaching practices portrayed in the video.
About This Course, cont’d.

The Course Guide
This guide offers an abundance of learning activities and resources that can be adapted to different learning environments. Instructors and professional development group facilitators can choose among the activities to shape a course that fits their learners’ interests, goals, and larger learning context.

For every session of the course, the guide provides the following sections:

- **Key Questions and Learning Objectives** identify the specific learning goals of each session. This section is designed to support further inquiry into the four essential questions for the course and clarify what learners might achieve in each session.

- The **Session Overview** is an essay on the learning theories presented in each session. The overview reviews relevant research, discusses the learning process, and offers examples of how teachers can support their students’ learning.


- **Session Activities** suggest a possible structure for a two- or two-and-one-half-hour class session. They include *Getting Started* activities that can be used as session warm-ups or as activities that occur after video viewing; a summary of the *Session Video* program and information about the teachers showcased in the video; and *Discussion of Session Video* questions to focus learners on the key ideas in the session video.

- **Other Learning Activities and Assessments** is a “toolbox” rich with ideas to further learners’ understanding of the session video and the learning process. Instructors and workshop facilitators can use these tools, which have been designed for both new and experienced teachers, to organize their work in this course. The many activities to choose from offer opportunities for study both inside and outside the session. [Please see the box on the next page for detailed descriptions.]

- **Web Sites and Organizations** lists the Web sites of organizations relevant to each session topic.

- **References and Recommended Readings** lists references cited in the Session Overview and other relevant books and articles that learners may explore in addition to the reading assigned for the session.

The guide also includes **Appendices** which describe two long-term activities that extend over the entire course. Facilitators may use one of these as an ongoing activity in the course. Appendix B describes a *Curriculum Case Study*, an analysis teachers can conduct about a teaching and learning event in their own classroom. Appendix B also includes three exemplary preservice teacher curriculum case studies. Appendix C summarizes *Creating a Course Portfolio*. Session 1 presents brief overviews of each of these long-term activities, while the individual appendices present more detailed information about introducing, facilitating, and assessing each of the long-term assignments.
The Learning Classroom

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Introduction

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**About This Course, cont’d.**

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### Toolbox of Other Learning Activities and Assessments for Course Faculty and Group Facilitators

These activities and assessments are designed to offer multiple ways for learners to explore the relationship between theory and practice. Learning and assessment activities can be completed during a class or as outside assignments. If you choose to assign these activities as homework, you may want to plan classroom time for conversations that enable learners to both plan for and share the results of their inquiries and research with their classmates. Facilitators should use professional judgment to choose the activities that best meet learners' needs and the time and other resources available. Faculty and facilitators are encouraged to adapt and revise activities as they see fit.

**Applications**

These activities are designed to be used after a concept has been introduced. One or more of them may be chosen as in-session activities or as homework. Three examples follow:

1. **Journal**: Learners maintain an ongoing journal exploring and reflecting on concepts central to the session. Learners discuss their developing understandings, articulate their questions, and consider implications for practice.

2. **Field Assignments**: Learners describe and analyze a student's learning or a learning environment using a session's central concept.

3. **Create an Action Plan**: Learners describe how they will incorporate a concept from the session into their teaching.

**Checking for Understanding**

Three types of questions are provided to assess learner understanding of the session topics:

1. **Short-Answer Questions**
2. **Essay Questions**
3. **Reflective Essay**

**Long-Term Assignments**

These activities extend over several sessions. They are described briefly in Session 1. Appendices B and C contain detailed suggestions for introducing, facilitating, and assessing these long-term assignments.

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### The Web Site

The course Web site offers resources and learning activities. It contains the transcript of each video, the text from the print guide for each session, and transcripts of interviews with experts that expand on those found in the videos. The Web resources include links to other Web sites and online readings. The course Web site URL is [www.learner.org/channel/courses/learningclassroom](http://www.learner.org/channel/courses/learningclassroom).

Two Web site learning activities are posted for each session:

- **Questions for Reflection** challenge learners to view the video segments critically and raise questions of their own, and then to compare and respond to their questions and others posted on the Web site. These electronic discussion-starters encourage a deeper exploration of issues that are not covered explicitly in each video.

- **Learning Challenges** ask learners to consider a scenario from a course video in the light of different learning theories. The writing exercises stimulate reflection on how different theories work together and elicit ideas for applying theories in practice. Links to the Learning Challenges are found on the left-side navigation bar on session home pages.

The course Web site also includes **Channel-Talk**, an email discussion list for people taking this course.
Using the Guide, Session Videos, and Web Site—
A Note to Facilitators

The following sequence provides a sense of how you might structure a two-hour workshop, or a two-and-a-half-hour course meeting of *The Learning Classroom: Theory Into Practice*. The course materials have been designed to be quite flexible. Good teaching does not depend on a recipe, and the following sequence is only one suggestion for organizing a session. The Other Learning Activities and Assessments, for instance, are often appropriate either as homework or in-class tasks. Choose those that will work for your group of learners for any given session. Time estimates to help you plan are provided for each activity.

1. Prior to each session, learners should read the **Session Overview** and, where noted, a chapter from *How People Learn: Brain, Mind, Experience, and School* [Bransford, J. D., Brown, A. L., & Cocking, R.R. (Eds.). (2000). Washington, DC: National Academy Press. Available online at http://books.nap.edu/html/howpeople1]. Some sessions also ask learners to read other readily accessible readings from the Web or most libraries. The titles in **Recommended Readings**, listed at the end of the session materials, have been chosen because they cover the course material in greater depth than is possible in the session overviews. They offer excellent options for teachers who have access to them.

2. Begin the session with one or more **Getting Started** activities (10 minutes) that can be used as session warm-ups. These include reflection activities and prompts for free-writes, pair-share, or small group discussion questions.

3. Lead a **Discussion of Session Readings** (20 minutes). Facilitators can choose from among the **Applications** and **Checking for Understanding** activities as sources of questions, or use their own questions to launch a discussion of the session readings.

4. Watch the **Session Video** (30 minutes), and lead a whole-class discussion (20 minutes). Use some of the questions in **Discussion of Session Video** at “video pauses” identified by a small oval icon with the words *The Learning Classroom*, appearing in the upper corner of the screen. The icon appears as a reminder a few seconds before the pause point occurs. When the icon appears, follow the text of the audio cue provided in this course guide and stop the tape at the end of the transcribed text, after the icon fades out. These questions are designed to focus learners on key ideas in the session. Replay short sections or use different focus questions to increase the value of watching the segments. Watching the video a second time after or during a class discussion may also be beneficial.

5. Conduct an **Applications** activity—journal writing, preparing for a field-based assignment, or developing an action plan (30 to 45 minutes).

   OR

   Discuss learners’ participation and work in one of the **Long-Term Activities**—the **Curriculum Case Study** or **Creating a Course Portfolio** (30 to 45 minutes).

   OR

   Write an essay as a **Checking for Understanding** activity (30 to 45 minutes). Refer to session readings to complete this activity.

   OR

   Go to the Web **Learning Challenges** and write one of the assignments from a scenario, or pose questions for reflection and compare them with those posted by others (30 to 45 minutes).

6. Conduct a **Getting Started** activity (10 minutes) for the next session to prepare for the assigned reading.
Facilitating the Course

The following information is provided to facilitate this video- and Web-based course.

Web-Facilitated Interactions
The Learning Classroom Web site provides “mailto” forms as part of its Web activities. These forms allow learners to write their responses into an email message as they are viewing the site. When they are done writing, they can fill in the email address and send the response through their own email system to their colleagues or facilitator. (An email account is required to use this feature of the Web site. Faculty or facilitators should decide if the emails should be sent to them, a class listserv, or other individuals in the class.)

Channel-Talk
Channel-Talk is an email discussion group moderated by the Annenberg/CPB Channel. There is a special group reserved for faculty and facilitators of this course. Join it and converse with other faculty and facilitators conducting this course from all over the country. Encourage the teachers in your course to register as well. Go to the course Web site at www.learner.org/channel/courses/learningclassroom to register.

Registration and Credit
Go to www.learner.org/4gradcredit for details on receiving graduate credit for The Learning Classroom: Theory Into Practice.

Video Information

Video Availability—The video programs are broadcast free on the Annenberg/CPB Channel. You may choose to watch a live broadcast or tape the programs to watch at a more convenient time. Find out more about access to the Annenberg/CPB Channel and see the broadcast schedule for this course at www.learner.org. If you do not have access to the Annenberg/CPB Channel, you may watch our free simulcast online via broadband streaming or purchase videocassettes from our online catalog.

Video Pauses—The pause points in the video identify places to stop the videotape and lead the video viewing discussion. [See Discussion of Session Video in the Session Activities section.] They are identified by a small oval icon that appears in an upper corner of the screen with the words The Learning Classroom. You may find it useful to practice locating The Learning Classroom icons on the tape as you follow the audio cues provided. The pause point for discussion is right after the icon disappears.

Playing Tapes in Group Settings—Recording the broadcast programs provides the option of playing them several times to study what the teachers participating in the videos are doing and saying about their work, and to take advantage of the pause points for group discussion or individual reflection. When facilitators play any tape in a group setting, it is a good idea before the group arrives to make sure that everything works, that the videotape is cued, and that the volume is appropriate for the room.

Who's Who

Principal Advisor
Linda Darling-Hammond is the Charles E. Ducommun Professor of Education at Stanford University, where she teaches courses in education policy, teacher education, and school reform. Professor Darling-Hammond serves as faculty sponsor for the Stanford Teacher Education Program. She was the founding Executive Director of the National Commission for Teaching and America’s Future, the blue-ribbon panel whose 1996 report What Matters Most: Teaching for America’s Future catalyzed major policy changes across the United States to improve the quality of teacher education and teaching. Her research, teaching, and policy work focus on issues of teaching and teacher education, school restructuring, and educational equity. Among her more than 200 publications is The Right to Learn, recipient of the American Educational Research Association’s Outstanding Book Award for 1998, and Teaching as the Learning Profession (co-edited with Gary Sykes), recipient of the National Staff Development Council’s Outstanding Book Award for 2000.
About This Course, cont’d.

Onscreen Experts
Short biographies of the on-camera experts may be found on The Learning Classroom Web site. On-camera research experts in the course include:

- **James P. Comer**, M.D., Maurice Falk Professor of Child Psychiatry, Yale University School of Medicine’s Child Study Center
- **David Elkind**, Ph.D., Eliot Pearson Department of Child Development Faculty, Tufts University
- **Howard Gardner**, Ph.D., John H. and Elisabeth A. Hobbs Professor in Cognition and Education, Harvard University Graduate School of Education
- **Daniel Goleman**, Ph.D., Co-Founder, Collaborative for Academic, Social, and Emotional Learning
- **Gloria Ladson-Billings**, Ph.D., Professor of Curriculum and Instruction, University of Wisconsin, Madison
- **Luis Moll**, Ph.D., Professor, Department of Language, Reading, and Culture, College of Education, University of Arizona
- **Annmarie Sullivan Palincsar**, Ph.D., Jane and Charles Walgreen Professor of Reading and Literacy, University of Michigan, Ann Arbor
- **Roy Pea**, Ph.D., Professor of Education and Learning Sciences, Stanford University
- **Lee S. Shulman**, Ph.D., President, Carnegie Foundation for the Advancement of Teaching
- **Deborah Stipek**, Ph.D., Dean, School of Education, Stanford University
- **Roland Tharp**, Ph.D., Director, Center for Research on Education, Diversity and Excellence (CREDE), University of California, Santa Cruz

Participating Teachers
On-camera teaching experts in the course include:

- **Avram Barlowe**, M.A., The Urban Academy, New York, NY
- **Kristin Bijur**, San Francisco Community School, San Francisco, CA
- **William Dean**, M.A., East Palo Alto High School, East Palo Alto, CA
- **Mary Edmunds**, M.A., Detroit High School for the Fine and Performing Arts, Detroit, MI
- **Nancy Flanagan**, M.A., Hartland Middle School, Hartland, MI
- **Jeff Gilbert**, M.A., East Palo Alto High School, East Palo Alto, CA
- **Ken Gillam**, M.A., Detroit High School for the Fine and Performing Arts, Detroit, MI
- **Sandie Gilliam**, San Lorenzo Valley High School, Felton, CA
- **Kathleen Haynes-Parvin**, M.A., Birney Middle School, Southfield, MI
- **Kendra Hearn**, M.A., West Bloomfield High School, West Bloomfield, MI
- **Julie Helber**, M.A., Paddock Elementary School, Milan, MI
- **Donald Johnson**, M.A., Christopher Columbus Middle School, Detroit, MI
- **Fe MacLean**, M.A., Paddock Elementary School, Milan, MI
About This Course, cont’d.

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- Georganne Urso-Flores, M.A., Ann Visger Elementary School, River Rouge, MI
- Rebecca Young, M.A., Ann Visger Elementary School, River Rouge, MI