

Workshop 5

What Are Connecting Concepts?

This workshop session examines a key to planning strong integrated units—finding concepts that can connect learning in different disciplines. In the program, we see how teachers organize their instruction around common themes and concepts.

Learning Goals

The goals of this workshop are for you to:

- Identify and discuss themes and concepts that can connect curriculum and instruction
- Practice creating activities that support common concepts and help bridge different disciplines

Featured Classroom Examples

- Seventh-grade band students study and play military marches to explore the theme of World War II.
- An eighth-grade class explores the concept of conflict through social studies, visual art, and dance.
- Sixth-graders explore cultural universals by creating their own civilizations.

Workshop Session (On-Site)

Get Ready

Think briefly about an area of your curriculum. (10 minutes)

On a sheet of paper, write the name of a curriculum unit you teach. Underneath, make short lists under each of the following headings:

Curriculum unit I teach:

Topics Involved

Themes Involved

Concepts Involved

Discuss as a group:

- What, if anything, distinguishes a topic, a theme, and a concept, as you understand these?
- Which would be most helpful to use as a common goal in integrating teaching across different disciplines? Why?

Watch the Workshop Program (60 minutes)

Consider the following questions as you watch the program—they will appear as discussion prompts on the screen. If you are part of a professional development group, consider stopping the video to discuss each question with your colleagues.

- What techniques can you use to connect to a theme through the arts?
- How can universal concepts help your students form ideas and opinions?
- How could a concept-based approach improve your curriculum?

Activities and Discussion

Activity: Finding Connecting Concepts

Set up. (5 minutes)

Divide workshop participants into pairs, preferably with each member from a different discipline. Give a copy of the handout “Possible Concepts for Integrated Instruction” (found at the end of this chapter) to each pair.

Workshop Session, cont'd.

Find and discuss two connecting concepts. (20 minutes)

Have each pair identify two concepts from the list of possible concepts that could be integrated and explored in the two content areas. They should then brainstorm instructional activities for each concept. Finally, have them decide which concept would be better to teach, based on the following criteria:

- Student interest and engagement
- Content addressed in each discipline
- Significance/connections to students lives

Discuss as a group. (15 minutes)

Have pairs report to the larger group which connecting concept they decided was best to organize teaching around, and why. As a group, discuss what makes some concepts worth teaching to, and what makes others less valuable.

Between Sessions (On Your Own)

Online Activity: Build a Bridge Between Disciplines

Before or after participating in this session, you may want to clarify what a connecting concept is, and how it can serve as a bridge between disciplines. Try the interactive exercise called “Build a Bridge Between Disciplines,” available on the Web site that accompanies *Connecting With the Arts: A Workshop for Middle Grades Teachers* (www.learner.org/channel/workshops/connectingwitharts). Choosing from a range of concepts and instructional activities, you’ll construct a curriculum “bridge” that can help students integrate arts and non-arts learning.

Additional Resources

Web Resources

Center for Concept-Based Education
<http://www.collaborative.org/ccbe/index.html>

A concept-based curriculum model for today’s classrooms

Print Resources

Beane, James. *Toward A Coherent Curriculum*. Association for Supervision & Curriculum Development, 1995. ASIN: 0-87120-311-1

Eighteen contributors—professors, administrators, and classroom teachers—discuss their experiences in answering the question of what it means to be an educated person.

Campbell, Dorothy, & Harris, Linda. *Collaborative Theme Building: How Teachers Write Integrated Curriculum*. New York: Allyn & Bacon, 2000. ISBN: 0-20532-354-5

This book was written to assist pre-service and in-service elementary school teachers, principals, and curriculum specialists in developing a thematic, interdisciplinary curriculum.

Erickson, Lynn H. *Concept-Based Curriculum and Instruction: Teaching Beyond the Facts*. Thousand Oaks, Calif.: Corwin Press, 2002. ISBN: 0-76194-640-3

This book describes specific strategies that teach students the skills they need in order to think conceptually and solve problems in today’s complex world.

Erickson, Lynn H. *Stirring the Head, Heart, and Soul* (2nd ed). Thousand Oaks, Calif.: Corwin Press, 2000. ISBN: 0-80396-885-X

This is a thoughtful “how to” of curriculum design, where educators will find practical structures and specific classroom examples of effective curriculum strategies.

Hayes Jacobs, Heidi. *Interdisciplinary Curriculum: Design and Implementation*. Association for Supervision and Curriculum Development. 1989. ISBN: 0-87120-165-8

This book provides advice for teachers on how best to present material in a manner that connects subject areas together and is relevant to life outside the classroom.

Possible Concepts for Integrated Instruction

Dance	Music	Theatre	Visual Art
balance contrast direction force/energy genre interpretation level movements pathway pattern point of view repetition rhythm shape space style time unity/variety variation	balance contrast duration dynamics form genre harmony interpretation melody pattern perception pitch point of view repetition rhythm scale style tempo texture timbre tone unity/variety variation	audience balance character conflict conflict/resolution contrast dialogue dramatic action genre interpretation mood plot/story point of view repetition rhythm setting style theatre conventions theme unity/variety variation	angle balance color contrast description form interpretation line pattern perception point of view proportion repetition rhythm scale shape space style symmetry texture unity/variety
Literature	Mathematics	Science	Social Studies
beliefs/values cause/effect change character conflict/cooperation cycle form genre interactions motivation order patterns perceptions point of view space systems time	cause/effect field gradient interaction invariance model number order pattern probability proportion quantification ratio scale symmetry system theory	cause/effect change cycle energy/matter equilibrium evolution field force interaction model order organism population replication systems theory time/space	beliefs/values cause/effect change/continuity civilization conflict/cooperation culture cycle diversity evolution interaction interdependence migration/immigration order patterns point of view populations systems

Concepts derived from *Concept-Based Curriculum and Instruction: Teaching Beyond the Facts* by H. Lynn Erickson, and from the staff of the Southeast Center for Education and the Arts

Notes

Workshop 6

What's the Big Idea?

This workshop session is about planning and teaching toward Big Ideas—important understandings that have lasting value. In the program, you'll see how arts-integrated instruction enables students to make deeply personal connections to what they are learning.

Learning Goals:

The goals of this workshop are for you to:

- Understand and identify Big Ideas
- Explore ways to design arts-integrated instruction that helps students to discover Big Ideas

Featured Classroom Examples

- Sixth-graders have a visceral experience that helps them understand what all cultures have in common.
- Eighth-graders gain a deeper understanding of what makes their neighborhood special.
- Studying history and music through the lens of a play gives seventh- and eighth-graders insights into the past, present, and future.

Workshop Session (On-Site)

Get Ready

Identify some Big Ideas you already teach. (10 minutes)

On a sheet of paper, write the name of a curriculum unit you teach, and underneath list one or two Big Ideas you want students to come away with. Big Ideas are important understandings that have lasting value for students. They should answer the question, “So what? Why is this relevant to me?”

As a group, share and discuss your Big Ideas:

- What for you distinguishes a Big Idea from other concepts or knowledge?
- How do you go about teaching to a Big Idea?
- How do you know if and when students have gained an understanding of a Big Idea in a unit you’re teaching?

Watch the Workshop Program (60 minutes)

Consider the following questions as you watch the program—they will appear as discussion prompts on the screen. If you are part of a professional development group, consider stopping the video to discuss each question with your colleagues.

- How could a Big Idea frame your planning and teaching?
- How can the interests of your students guide the development of Big Ideas?
- How can the arts lead your students to deeper inquiry around Big Ideas?

Activities and Discussion

Activity: Workshop Discussion

Review what you know about Big Ideas. (20 minutes)

Break into discussion groups, with each group concentrating on one of the three classroom examples featured in the program. Use the questions below to guide the small-group conversations.

Questions for Segment One:

In the first segment, we watched as sixth-graders had a visceral experience that helped them understand what all cultures have in common.

- What did you see as the Big Idea in this Unit?
- How did the organization of the unit help students understand the Big Idea?
- How are Big Ideas important in guiding curriculum and the sequence of instruction?

Workshop Session, cont'd.

Questions for Segment Two:

In the second segment, eighth-graders gained a deeper understanding of what makes their neighborhood special.

- What were the Big Ideas in this teaching example?
- Where did you see evidence that a Big Idea focuses student learning?
- What are some other ways of guiding student learning within an arts-integrated context?

Questions for Segment Three:

In the third segment, we saw students studying history through the lens of the play *Our Town*, gaining insights into the past, present, and future.

- What were some of the instructional strategies you observed?
- How do the learning experiences we see in this example take students beyond their understanding of the play, to wider concepts or skills?
- What Big Ideas might the students understand as a result of studying this play and time period?

As a group, discuss ways to tune your instruction toward the teaching of Big Ideas. (20 minutes)

Consider these questions:

- Is teaching using Big Ideas a new concept for you?
- How do you typically go about planning your curriculum?
- How do you go about deciding what you want students to get out of a particular unit?
- In planning your curriculum, do you tend to start with a Big Idea that you want students to come away from the unit with, or do you let the Big Ideas emerge out of the material concentrated on during the unit?

Between Sessions (On Your Own)

Additional Resources

Web Resources

Backward Design for Forward Action
http://www.ascd.org/articles/el200302_mctighe.html

Reviews the key concepts and essential questions that underlie content standards

National Board for Professional Teaching Standards
<http://www.nbpts.org>

The National Board's influential teaching standards, including early adolescent generalist standards

Print Resources

Wiggins, Grant, & McTighe, Jay. *Understanding by Design*. Upper Saddle River, N.J.: Prentice Hall, 2000. ISBN: 0-13093-058-X

What enduring knowledge is worth understanding? How will we know that students truly understand and can apply knowledge in a meaningful way? This book explores these and other important questions and provides practical solutions for the teacher-designer.

Wiggins, Grant, & McTighe, Jay. *The Understanding by Design Handbook*. Alexandria, Va.: Association for Supervision & Curriculum Development. 1999, ISBN: 0-87120-340-5

The handbook offers the practical side: a unit-planning template, worksheets, exercises, design tools, design standards and tests, and a peer review process for learning and applying the ideas in *Understanding by Design*.

Workshop 7

Identifying What Students Are Learning

This workshop session investigates ways to evaluate student learning in and through the arts. In the program, you'll see teachers using arts-based performance tasks to assess student understanding.

Learning Goals

The goals of this workshop are for you to:

- Explore ways the arts can be used to assess student understanding
- Examine performance tasks and determine the skills and knowledge needed by students to be successful

Featured Classroom Examples

- Students demonstrate their understanding of the laws of motion by teaching younger children.
- Seventh-graders discuss the research that went into a satisfying production of *Fiddler on the Roof*.
- Sixth-graders create a museum exhibit.
- A science class engages in a debate about whether or not a frog should be allowed to join a ballet company.

Workshop Session (On-Site)

Get Ready

Review your own assessment practices. (10 minutes)

Choose an area in your curriculum to think about. Make a list of typical types of student assessment you perform.

As a group, discuss:

- How do you typically gauge what it is that your students are learning?
- How might using the arts as a form of assessment give new insight into student understanding and achievement?

Watch the Workshop Program (60 minutes)

Consider the following questions as you watch the program—they will appear as discussion prompts on the screen. If you are part of a professional development group, consider stopping the video to discuss each question with your colleagues.

- How can engagement in the arts provide effective opportunities for student assessment?
- How can you assess student understanding in multiple content areas through an arts process?
- How can an arts-based performance task effectively evaluate student understanding?
- How can you use non-arts activities to assess learning in the arts?

Activities and Discussion

Activity: Identify what students are learning in different performance tasks.

Analyze performance tasks. (20 minutes)

Student engagement in the arts most always culminates in a performance or exhibit. Such tasks provide evidence that students are able to use the knowledge and skills they have learned in context—while making art.

Print and distribute the four Sample Performance Tasks found at the end of this chapter. *Fold them so that participants cannot see the criteria on the lower half of the page.* Ask the participants not to look at the back of the folded page until instructed to do so. In pairs or small groups, examine the components of the performance task: goal, role, audience, situation, and product. Then discuss the following question:

- What skills and knowledge are needed by the students to successfully complete the performance task?

Develop criteria for judging students' performance. (30 minutes)

Then ask the pairs or small groups to develop three lists of criteria they think are appropriate for evaluating students' understanding and accomplishment. There should be criteria for the creating, performing, and responding stages of the performance task. After they are finished, they can turn the paper over and see the criteria identified by the teacher who developed the sample culminating assessment.

Between Sessions (On Your Own)

Additional Resources

Web Resources

Assessing Student Work With Project-Based Learning
<http://pblmm.k12.ca.us/PBLGuide/AssessPBL.html>

A list of roles that assessment plays in the classroom and what makes assessment “authentic”

Principles of Good Practice for Assessing Student Learning
<http://www.aahe.org/assessment/principl.htm>

Nine principles to guide the assessment of student learning

Print Resources

Arter, Judith A., & McTighe, Jay. *Scoring Rubrics in the Classroom: Using Performance Criteria for Assessing and Improving Student Performance*. Thousand Oaks, Calif.: Corwin Press, 2000. ISBN: 0-76197-575-6

This book offers a practical approach to assessing challenging but necessary performance tasks like creative writing, “real-world” research projects, and cooperative group activities.

Hayes Jacobs, Heidi. *Mapping the Big Picture: Integrating Curriculum and Assessment K-12*. Alexandria, Va.: Association for Supervision & Curriculum Development, 1997. ISBN: 0-87120-286-7

Heidi Hayes Jacobs discusses the importance of asking “essential questions” and of designing assessments that reflect what teachers know about the students in their care.

Sample Performance Task #1
for an Integrated Dance & Language Arts Unit on
MYTHOLOGY: DAEDALUS AND ICARUS

Goal:

To understand the link between Greek folk dance and Greek mythology

Student Roles:

Dancers retelling the Daedalus and Icarus myth

Audience:

Peers

Situation:

Students dance the oldest Greek dance known, the Geranos, and then compare it to their participation in a current Pan-Hellenic dance of celebration, the Kalamatianos.

Product:

A folk dance directly inspired by the legend of Daedalus and Icarus

-----[fold here]-----

Criteria for Assessment:

Creating

Elements of the dance illustrate aspects of the legend conveying how the emotion of fear is faced and overcome.

Performing

Individuals contribute fully and uniquely to the ensemble effort. The dances are performed correctly and in unison.

Responding

Appropriate vocabulary is used with understanding. Explanations of the deeper meanings of the myths can be identified (such as cause and effect, overcoming fear, pride).

Sample Performance Task #2

for an Integrated Music & Language Arts Unit on MYTHOLOGY: DAEDALUS AND ICARUS

Goal:

To understand how cause and effect are represented in the legend of Daedalus and Icarus

Student Roles:

Composers creating programmatic music for the myth

Audience:

Peers

Situation:

Students create music to represent events, ideas, and relationships that define and support character traits, motivations, and actions.

Product:

A musical composition evoking causes and effects occurring in the myth

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Criteria for Assessment:

Creating

The compositions exemplify supporting evidence for cause and effect relationships in the myth.

Performing

Individuals contribute fully and uniquely to the ensemble effort. Programmatic choices are thoughtfully motivated and supported.

Responding

Appropriate vocabulary is used with understanding. Explanations and examples of causes and effects present in the myth can be supported in discussion.

Sample Performance Task #3

for an Integrated Theatre & Language Arts Unit on MYTHOLOGY: DAEDALUS AND ICARUS

Goal:

To understand how cause and effect are represented in the “Daedalus and Icarus” myth

Student Roles:

Actors role-playing characters from the myth

Audience:

Peers

Situation:

Students create scenes to represent events, ideas, and relationships that define and support character traits, motivations, and actions.

Product:

Improvised scenes exploring causes and effects occurring in the myth

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Criteria for Assessment:

Creating

The improvised scenes present the “voices” that influence the characters’ decision-making process, illustrating the cause and effect relationships in the myth.

Performing

Individuals contribute fully and uniquely to the ensemble effort. Characterization is motivated and maintained.

Responding

Appropriate vocabulary is used with understanding. Explanations and examples of causes and effects present in the myth can be supported in discussion.

Sample Performance Task #4

for an Integrated Visual Art & Language Arts Unit on MYTHOLOGY: DAEDALUS AND ICARUS

Goal:

To engage in dialogue about one's own artwork compared to the work of others in relation to the Daedalus and Icarus legend

Role:

Curators of an exhibit

Audience:

Peers

Situation:

Students create masks to represent the characters in the Daedalus and Icarus myth, and then arrange and label an exhibition of their work.

Product:

An exhibit of masks

-----[fold here]-----

Criteria for Assessment:

Creating

The work done on the mask is focused on a single trait drawn from a character in the myth. Materials and techniques are suited to the idea.

Performing

The exhibit of the masks is well crafted and arranged in a logical plan. Masks are hung securely and appropriate information cards are placed in such a way that each is visually connected to the mask it talks about.

Responding

Appropriate vocabulary is used with understanding when talking about the artwork and the exhibit. Labels provide some insight into the relationship between the mask and the myth.

Notes

Workshop 8

Reflecting on Our Practice

This workshop session explores methods for assessing instructional practice. In the program, you'll see teachers reflecting and interacting with colleagues to evaluate and refine their planning and teaching. To conclude, the discussion group members model a protocol that allows teachers to draw on the expertise of colleagues to refine their practice.

Learning Goals

The goals of this workshop are for you to:

- Learn reflective methods for evaluating curriculum design and instruction
- Reflect upon learning that has taken place during the workshop and establish arts integration goals for the future.

Featured Classroom Examples

- Teachers engage in reflective discussion at various stages of their unit about frogs and ballet.
- The team of teachers that created the civilizations unit considers how to revise their instruction for next year.
- Another team of teachers meets weekly to discuss the integration of all their subjects.
- Students interview senior citizens and write short stories based on what they hear.

Workshop Session (On-Site)

Get Ready

Read and think about the following quotation: (5 minutes)

“There are three principal means of acquiring knowledge . . . observation of nature, reflection, and experimentation. Observation collects facts; reflection combines them; experimentation verifies the result of that combination.”

—Denis Diderot, *On the Interpretation of Nature*, 1753

Consider the following questions:

- Does this quotation apply to a school setting? How? Why or why not?
- How and when do you reflect on your teaching practice?
- How do teachers at your school typically reflect on their practice?
- Is there time for formal reflection at your school?
- How does reflection affect your practice?

Watch the Workshop Program (60 minutes)

Consider the following questions as you watch the program. If you are part of a professional development group, consider stopping the video to discuss each question with your colleagues.

- How could you work with a colleague to evaluate your instruction?
- How can your colleagues help you improve your teaching?
- How can group reflection help with planning integrated instruction?
- How can you improve your practice by using structured conversations with colleagues?

Activities and Discussion

Activity: Planning for Arts Integration

Reflect on this eight-part professional development workshop. (10 minutes)

Ask each person to complete the following statements about arts integration, then share them with the group:

I used to think _____.

Now I think _____.

Workshop Session, cont'd.

Make plans to begin or expand arts-integrated instruction. (45 minutes)

Write or post the following seven statements, with their four categories, on the board. Have each person write responses on sticky notes (being sure to sign each note) and have them place the sticky notes under the appropriate headings.

Concepts/Content

I am interested in teaching these concepts through integrated instruction:

Arts Knowledge

I have the following arts knowledge and expertise:

I need to know more about or need assistance with:

Collaboration

I am interested in the following collaborations:

I am available for planning at these times:

Resources

I have or know about the following resources to aid arts integration:

What I need is:

Discuss the results, focusing on common interests and needs and how people can assist each other. Individually, decide on and write down the next step each person will take toward arts integration.

After the Final Session (On Your Own)

Additional Resources

Web Resources

Creating a Knowledge Base for Teaching: A Conversation With James Stigler
http://www.ascd.org/publications/ed_lead/200203/willis.html

Advocates professional development that is site-based, long-term, and directly related to teacher practice

Critical Friends
http://www.ascd.org/publications/ed_lead/200203/bambino.html

Describes how examining student work using the Critical Friends technique can enhance teaching

National Board for Professional Teaching Standards
<http://www.nbpts.org/>

The National Board's influential teaching standards, including early adolescent generalist standards

Reflective Practice and Professional Development
<http://www.ericfacility.net/ericdigests/ed449120.html>

A digest that reviews the concept, levels, techniques for, and benefits of reflective practice

Print Resources

Hall McEntee, Grace, Appleby, Jon, & Dowd, Joanne. *At the Heart of Teaching: A Guide to Reflective Practice (The Series on School Reform)*. New York: Teachers College Press, 2003. ISBN: 0807743488

This book delves into reflection as a concept and provides specific, replicable tools for professional practice.

McDonald, Joseph P., Mohr, Nancy, & McDonald, Elizabeth C. *The Power of Protocols: An Educator's Guide to Better Practice (The Series on School Reform)*. New York: Teachers College Press, 2003. ISBN: 0807743615

This book describes nearly 30 protocols or "scripts" for conducting meetings, conversations, and other learning experiences among educators.

Sommers, William, Montie, Jo, & York-Barr, Jennifer. *Reflective Practice to Improved Schools: A Guide for Educators*. Thousand Oaks, Calif.: Corwin Press. 2001. ISBN: 0761977635

The book provides a framework and strategies for supporting educators to continuously and meaningfully reflect on their practice—by themselves and with their colleague—to create schools in which both students and adults continually learn.

Appendix

Credits

For Annenberg/CPB

Karen Gallagher, Senior Project Officer

Project Advisors

Mary Belfi, National Board-certified visual art teacher at a public middle school in New York City for 33 years; instructor in art education at Hofstra University

Deborah Brzoska, design coach for the Small Schools Initiative of the Bill & Melinda Gates Foundation; founding principal of the Vancouver (Washington) School of Arts and Academics; group leader for the arts for the National Assessment of Educational Progress

Richard Deasy, director of the Arts Education Partnership in Washington, D.C.

Stephen Gonzales, Denver Public Schools manager of curriculum and instruction for music education and advanced placement; middle and high school instrumental music specialist

Mac Arthur Goodwin, president of the National Art Education Association; board member of the National Board for Professional Teaching Standards; middle and high school visual art teacher; Special Consultant in arts education to the South Carolina Department of Education

Joseph Juliano, Jr., director of fine arts for the Hamden (Connecticut) School District; past president of the American Alliance for Theatre and Education; chair of the Interdisciplinary Committee of the Consortium of National Arts Education Associations

Donald Killeen, national program manager of the National Arts Education Consortium at The Ohio State University; national project director for the Transforming Education Through the Arts Challenge, a national education reform initiative

Marilyn Stewart, professor of art education at Kutztown University in Pennsylvania; general editor of Davis Publications' *Art Education in Practice* series

Hank Troy, professional musician; former social studies teacher; co-founder of a public arts magnet school in Denver; administrator of an arts-in-education program

Instructional Designers

Southeast Center for Education in the Arts (SCEA)

Located at The University of Tennessee at Chattanooga, the Southeast Center for Education in the Arts conducts innovative research in comprehensive arts education and school reform. SCEA develops and implements professional development programs enabling educators from kindergarten through college level to establish the rigorous study of the arts as an integral component of basic education for all students. As one of six regional institutes established in 1988 by the Getty Center for Education in the Arts, SCEA pioneered research in discipline-based dance, music, theatre, and visual art education. The Tennessee Arts Commission awarded SCEA its 2003 Governor's Arts Leadership Award for nurturing creative inquiry into teaching and learning.

SCEA collaborated with Lavine Production Group on *The Arts in Every Classroom*, a teaching practices library and workshop for elementary school teachers, which began airing on the Annenberg/CPB Channel in 2003.

Kim Wheatley, Director

Kim Wheatley, who headed the instructional design team for *Connecting With the Arts*, holds The University of Tennessee Lyndhurst Chair of Excellence in Arts Education. Kim has taught theatre at the high school and college levels, and was the theatre specialist for the Texas Education Agency. He served on the writing committees for the *National Standards for Arts Education* and the *INTASC Model Standards for Licensing Classroom Teachers and Specialists in the Arts*.

Joel Baxley, Director of Visual Art

Scott Rosenow, Director of Theatre

Susanne Burgess, Director of Music

Appendix, cont'd.

Production Team

Lavine Production Group

Project Management and Video Production

Lavine Production Group, based in New York City, specializes in documentary films and television programs about education and the arts. LPG has created several professional development programs for Annenberg/CPB, including *The Arts in Every Classroom*, an elementary level workshop and library, and *The Missing Link*, for middle grades math teachers. LPG has also produced programs for PBS, the Arts & Entertainment Network, and Reader's Digest.

Kaye Lavine, project director and executive producer

Miriam Lewin, series producer

Gary Bradley, supervising editor

Laura Young, editor

David Hogoboom, director of photography

Elizabeth Elson, segment producer, post production supervisor

Claudia Mogel, segment producer

Jacqueline Delibes, post production coordinator

Carl Anderson, logo and series animation design

Elliot Sokolov, theme music

James Krieger, post production sound

Reynelda Muse, workshop host

EDC Center for Children and Technology

Print Materials and Web Development

EDC's Center for Children and Technology investigates how technology can influence and enhance teaching and learning across a wide range of educational settings. CCT conducts basic, applied, and formative research, working in collaboration with educational, corporate, government, and research institutions. CCT also designs and develops prototype software and instructional resources that support engaged, active learning.

Bill Tally, director of research and Web development

John Parris, designer

Julia Hermos, researcher and instructional materials developer

Chad Fasca, writer

Laura Henze, programmer

Terry Baker, arts advisor

Cornelia Brunner, design advisor