

Title

The Classroom Computer as a Learning Station (formerly Tech140)

Target Audience

This course is intended for pre-service and in-service teachers of grades 1-8.

Prerequisites

To successfully participate and complete the assignments in this course, the learner must:

- Have past experience using the classroom computer.
- Have past experience working with the Internet.
- Be familiar with taking an online course or have completed the PBS “Practice Learning Online with TeacherLine” course.
- Be familiar with elementary or middle school educational content.

Course Description

In this course, learners will explore how one (or a limited number of computers) can be a valuable classroom tool when used as a learning station. Learners will discover how to guide student use of the computer for productivity, research, and curriculum enrichment. Throughout the course, learners will practice by designing learning center activities. As a final project, they will select one activity to implement, reflect on and revise the activity, and then develop a detailed plan for their new classroom learning center.

Instructor/Facilitator

See instructor/facilitator sheet

Credits

To be determined by college or university

Goals

The overall goal of this course is for learners to develop student use of the classroom computer for productivity, for directed exploration, to foster cooperation, and to access and organize information. By the end of this course, learners will:

- Understand how student use of the computer can help transfer knowledge in other subject domains and apply this in their practice.
- Understand and have the ability to use software and Web sites to create productivity, research, and enrichment centers.
- Incorporate the use of effective strategies for managing the classroom computer.
- Develop and implement a plan for the successful use of the classroom computer by students.

Outline of Content and Assignments

After previewing the documents in the Course Information area, learners will proceed to Course Content to complete the following six sessions, working through each session in order. Throughout the sessions, learners are asked to articulate their ideas in various forms: they are encouraged to reflect on their ideas and experiences in their online journal; the discussions in the discussion forum are designed to allow learners to glean information from other learners' experiences. For the final project, learners will be asked to develop a detailed plan for their classroom computer learning station, based on their analysis of the activities they completed and implemented in the other sessions, as well as the materials they reviewed for the course. While this detailed plan will be created during Session 6, the other sections of the plan will be developed through the various activities completed throughout the course. To complete the final project, learners will develop and expand on one of their project ideas, develop a rubric, and then create an implementation plan.

This course is designed to address ISTE's *Educational Technology Standards and Performance Indicators for All Teachers*. These standards define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings.

This course specifically addresses the following ISTE NETS*T:

I. Technology Operations and Concepts

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- A. Demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education
- B. Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II. Planning and Designing Learning Environments and Experiences

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- A. Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B. Apply current research on teaching and learning with technology when planning learning environments and experiences.
- C. Identify and locate technology resources and evaluate them for accuracy and suitability
- D. Plan for the management of technology resources within the context of learning activities.
- E. Plan strategies to manage student learning in a technology-enhanced environment.

III. Teaching, Learning, and the Curriculum

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- D. Manage student learning activities in a technology-enhanced environment.

V. Productivity and Professional Practice

Teachers use technology to enhance their productivity and professional practice. Teachers:

- A. Use technology resources to engage in ongoing professional development and lifelong learning.
- B. Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- C. Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

Visit cnets.iste.org for a full list of the ISTE's *Educational Technology Standards and Performance Indicators for All Teachers* and more information about these standards.

Session 1: Taking Charge of Your Resources

In this session, learners will assess and begin to learn to take charge of the resources they have available to them on their classroom computers, in order to begin to plan and organize exciting learning experiences for their students.

By the end of this session, learners will be able to:

- Define their professional goals and expectations for this course in their online journal.
- Explain their prior knowledge and experiences about classroom use of your computer in their online journal.
- Describe their vision for student use of the classroom computer in their online journal.
- Discuss student use of the computer in classrooms with limited technology.
- List and explain the software resources they have available for student use.

Read

- “Pump Up Your Computer: How To Transform One Classroom Computer Into a Powerful Learning Tool,” Part 2
- “Independent Study: How To Transform One Classroom Computer Into a Powerful Learning Tool,” Part 3
- “Online Simulations” (not required)

Write in online journal

- Reflect on expectations for the course.
- Reflect on your use of the classroom computer.
- Reflect on your vision for student use of and goals for the classroom computer.

View videos

- “The Classroom Computer as a Learning Station”
- “Managing the Computer Center” (not required)

Participate in an online discussion

- Introduce themselves to other learners.
- Respond to the following: “How realistic is it to implement student computer activities, such as the ones described in the articles, in a classroom with only one or two computers?”

Complete assignment

- Complete an inventory of the software you have available for use on your classroom computer.

Session 2: The Classroom Productivity Center

This session presents the types of activities students can work on in a classroom productivity center. Learners will then plan and design a lesson to use in their classrooms.

By the end of this session, learners will be able to:

- Explain and discuss how the use of technology in the classroom affects classroom management, use of instructional time, and student social behaviors.
- Identify software resources they have available for student use that can be used in a productivity center.
- Select and describe in the discussion forum a Web site that can be used by students in a classroom productivity center.
- Plan and design an activity for a classroom productivity center.

View videos

- “Learning About Communities”
- “The Student Productivity Center”

Read

- “Magical Student Mentors” (not required)

Complete assignments

- Update Software Inventory with information on productivity tools.
- Plan and design a lesson for the classroom computer productivity center.

Participate in an online discussion

- Respond to the following: “Using the computer center throughout the day can be a fruitful way of enhancing classroom management, making use of instructional time, and assisting positive social behaviors.” — Wilson, Jones, and Hail, 2003
Do you agree or disagree with this statement? Why? Use examples from the article or the videos to support your response.
- Share a productivity Web site, and then select a Web site posted by another learner, review the Web site, and add a comment.
- Peer review productivity lessons posted by other learners.

Complete Activities (not required)

- AppleWorks Slideshow WalkThrough
- Graph Master Walkthroughs (trial software available)
- Inspiration WalkThrough
- Microsoft PowerPoint WalkThrough
- QuizStar WalkThrough
- TimeLiner WalkThrough
- Web Worksheet Wizard WalkThrough

Session 3: The Classroom Research Center

In this session, learners will learn to help students develop Web research skills by helping to direct student choices and conduct meaningful research. Learners will review ways to set up a classroom research center, using both Web and software tools.

By the end of this session, learners will be able to:

- Identify and discuss the risks and benefits involved in having students use the Web for research.
- Review and reflect on ideas for developing a student research station.
- Identify software resources you have available for student use that can be used in a research center.
- Select and describe in the discussion forum a Web site that can be used by students in a classroom research center.
- Plan and design an activity for a classroom research center.

Read

- “Creating a Student Research Portal”
- “Web Literacy and Critical Thinking: A Teacher's Tool Kit”
- “Online Reference Tools” (not required)
- “The Internet Unplugged” (not required)
- “Models for Student Web-Based Research” (not required)

Participate in an online discussion

- Respond to the following: “Based on your own professional experiences and after viewing the video, “The Student Research Center,” what are the risks and benefits of having students do research on the Internet?”
- Share a research Web site, and then select a Web site posted by another learner, review the Web site, and add a comment.
- Peer review research lessons posted by other learners.

Write in online journal

- Reflect on implementing a student research station.

View videos

- “The Student Research Center.”

Complete assignments

- Update Software Inventory with information on research tools.
- Plan and design a lesson for the classroom computer research center.

Complete Activities (not required)

- Microsoft PowerPoint WalkThrough
- Placemark Research Center WalkThrough
- TrackStar WalkThroughs

Session 4: The Classroom Enrichment Center

The third and final category, using the classroom computer for enrichment activities, includes all software and Web activities that support the curriculum. Learners will be exploring a variety of resources in this session, and will then create another lesson plan.

By the end of this session, learners will be able to:

- Discuss the use of technology in the lower grades and its impact on learning in the upper grades.
- Select and describe in the discussion forum a Web site that can be used by students in a classroom enrichment center.
- Identify software resources they have available for student use that can be used in an enrichment center.
- Plan and design an activity for a classroom enrichment center.

Read

- “Using Online Resources: It’s Elementary Too”
- “The Right Write Site” (not required)

Participate in an online discussion

- Respond to the following statement: “The debate goes on as to whether or not computers should have a place in the elementary (particularly primary) classroom. Many times I have heard, “Put the new hardware where the older students will benefit and give their old hardware to the younger ones.”— VaReane Heese, 2001
- Share an enrichment Web site, and then select a Web site posted by another learner, review the Web site, and add a comment.
- Peer review enrichment lessons posted by other learners.

Complete assignments

- Update Software Inventory with information on enrichment tools.
- Plan and design a lesson for the classroom computer enrichment center.

Complete activities (not required)

- Tessellation Exploration WalkThrough

- Abacus International Math Challenge
- Math Forum's Problems of the Week
- Decisions, Decisions Current Issues
- Cultural Debates Online

Session 5: Transferring Knowledge

Student learning on the computer provides them with powerful ideas, lessons, and skills. During Session 5, learners will explore ways to help students transfer these skills to other subject areas and then apply this to the lesson they will implement in their classroom.

By the end of this session, learners will be able to:

- Analyze technology lessons to discuss how the knowledge learned transfers to other domains.
- Analyze how an e-mail activity can help to transfer learning in their online journal.
- Implement, evaluate, and revise an activity to use the computer as a learning station in their classroom.

Read

- "Transferring Knowledge with Technology"
- "E-mail Opens Up a World of Possibilities"

View video

- "Software Tools"

Participate in an online discussion

- Respond to the following: "How do the technology projects shown in the video make the students better learners?"

Write in online journal

- Reflect on the following: "How does the e-mail activity described in the article help transfer learning to other domains?"

Complete assignments

- Implement a lesson plan from session 2, 3 or 4.
- After implementing the activity, write a 3-4 page reflection paper on both how well the activity was implemented, as well as the other activities learners had created during the course.

Session 6: Developing Your Classroom Learning Station

In this session, learners will create a detailed plan for their learning station, and then think about their next steps beyond this course.

By the end of this session, learners will be able to:

- Develop a detailed plan for their learning station.
- Evaluate their plan to determine how they will enact it.

Final project

- Develop a detailed plan for the classroom computer-learning station based on their analysis of the activities created, implemented, and the materials reviewed in the course.

Participate in an online discussion

- Complete a review of two other posted plans.

Write in online journal

- Reflect on the following: “What supports do you have to help you implement your plan? What do you need to do in order to enact your plan successfully? What questions do you still have?”
- Reflect on acquired knowledge.
- Reflect on professional goals and expectations.

Schedule

This course is scheduled to take approximately 30 hours to complete readings, activities, video, assignments, reflections and a final project.

Requirements

Learners are expected to:

- Complete all assignments.
- Maintain an online journal.
- Participate and actively engage in discussions with fellow learners while contributing to the social construction of knowledge.
- Be self-directed and self-motivated.
- Ask for assistance when they need it.

Materials (hardware, software, plug-ins)

Technical Requirements

- Word processor
- Internet service provider
- E-mail

Academic Dishonesty Policy

To be inserted by university institution only

Evaluation

This course can be taken for graduate credit on a pass/fail basis, or for a letter grade and graduate credit. See graduate credit details pertaining to specific graduate credit institutions.

Last Update: May 13, 2005