Title
TECH315: Project Based Learning in the Connected Classroom

Audience
This course is intended for K-12 pre-service and in-service teachers.

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

- Past experience in working with and teaching K-12 students.
- Past experience in using e-mail and the Internet.
- Access to a group of students at the K-12 level in order to complete a Web tool implementation.
- Access to the use of the Internet in the classroom or a computer lab where students will be working.
- Be familiar with taking an online course or have completed the PBS “Practice Learning Online with TeacherLine” course.

Course Description
The 21st century can be defined as “The Age of Collaboration” – where new technologies allow groups of individuals to work together. Web tools such as Wikis, media sharing sites, and online social networks have so radically changed the meaning and means of collaboration that businesses and global organizations are redefining the skills required of their employees. This change in what is expected, valued, and nurtured in the workplace is also behind the driving force of certain innovative schools both across the country and internationally. They understand that skills such as working cooperatively are not just “add-ons” to the curriculum. By teaching students how to effectively collaborate with one another and making this skill a focus of their curriculums through project learning and the use of technology, they are preparing their students for the 21st century.

This course will help educators understand the importance of teaching collaboration and cooperation and their place in the school curriculum and the lives of their students. They will learn about Web 2.0 technologies and how they can support collaborative learning. They will revisit WebQuests and telecollaborative projects to see their place in a Web 2.0 world. They will study project learning and develop their own guide for developing collaborative skills that will be used for future planning and curriculum development in their classroom.

Instructor/Facilitator
See instructor/facilitator sheet

Credits
To be determined by college or university

Goals

PBS TeacherLine

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The overall goal of this course is for learners to integrate 21st century skills into the classroom through cooperation and collaboration skills.

At the end of this course, learners will:

- Understand what Web 2.0 is.
- Learn ways to successfully integrate the use of technology and Web 2.0 in order to facilitate the development of cooperation and collaboration skills in their students.
- Use Web 2.0 tools in the classroom in order to develop 21st century skills.
- Create a project guide for collaboration that integrates the use of project learning and assists educators in developing effective and meaningful projects in the classroom.

Outline of Content and Assignments

After previewing the documents in the Course Information section, learners will proceed to the Course Content to complete the following six sessions, working through each in order. Learners are encouraged to reflect on their ideas and experiences. The discussions in the discussion forum are designed to allow learners to glean information from other learners’ experiences both prior to and following the completion of the assignments. Throughout the course, learners work on their course project by developing ideas for a Project Guide for Developing Collaborative Skills. To complete the course project, learners develop a guide that integrates the use of Web 2.0 technologies, project learning, and 21st century skills.

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:

**ISTE NETS*T**

Standards 1 (a, b, c, d); 2 (a, c); 3 (a, b); 4 (d) 5 (a, c, d)

Visit [http://www.iste.org/AM/Template.cfm?Section=NETS](http://www.iste.org/AM/Template.cfm?Section=NETS) for a full list of the ISTE’s National Educational Technology Standards (NETS*T) and Performance Indicators for Teachers and more information about these standards.

Session 1: Cooperation and 21st Century Skills

In this session learners will explore the types of skills that students need for today and their implications on education. They will learn how technology has changed with the advent of Web 2.0 and they will explore strategies to help students learn to work together. They will also review several Web tools as they begin to learn how they can be used to help students develop cooperative and collaborative skills for working in effectively groups.

Learners will:

- Define their professional goals and expectations for this course.
- Explain their prior knowledge and experiences about using technology and Web 2.0 tools to develop cooperative and collaborative skills in the classroom.
- Identify the strategies and skills students need in order to work cooperatively and collaboratively with one another, including the use of assessment as a strategy to facilitate and support cooperation and collaboration.
- Discuss the role of technology in the lives of students outside of the classroom and ways to support student desires, needs, and passions for using technology and connecting through the use of technology, in the classroom.
• Review a Web 2.0 tool to determine how it could be integrated into the classroom to develop cooperation and collaboration.

Read
• “P21 Framework Definitions Document”
• “New Skills for a New Century”
• “Students Can Get Work Done in Groups”
• “World Without Walls: Learning Well with Others”

Write Journal Reflections
• Reflect on prior knowledge of course content and expectations for the course.
• Reflect on helping students work together.

Watch Videos
• “Learning and Working Together in a Collaborative Age”
• “The Machine is Us/ing Us”

Participate in Online Discussions
• Discuss student use of technology outside of the classroom vs. inside of the classroom.

Session 2: Project Learning
In this session learners will explore the benefits of project learning; the role of Web 2.0 in education and project learning; strategies to develop cooperative skills and collaboration so that project learning is successful; and resources for finding their own project-based learning activities to use in the classroom.

Learners will:
• Discuss the impact project-based learning has on student learning.
• Identify the features that make projects effective and meaningful and the role that technology and 21st century skills play in meeting their curriculum goals.
• Analyze a project-based learning project.

Read
• “Flat Classrooms”
• “The Power of Project Learning”
• “Why Teach with Project Learning: Providing Students with a Well-Rounded Classroom”
• “Real-World Issues Motivate Students”
• “Cooperative Education: Making it Work”
• “Minds on Fire: Open Education, the Long Tail, and Learning 2.0”
• “E-learning 2.0 – How Web Technologies are Shaping Education”

Write Journal Reflections
• Reflect on features of good projects and the role technology and 21st century skills play in a classroom project.

View Videos
• “An Introduction to Project Learning”

Participate in Online Discussions
• Discuss the impact project-based learning can have on student learning and achievement.
Complete Activities and Assignments
- Review given examples of projects.
- Begin the Project Learning Review Assignment

Session 3: Promoting Collaboration

In this session learners will continue to explore project-based learning projects and then read about, explore, and discuss WebQuests and telecollaborative projects, developing an understanding of how they are enhanced with the use of Web 2.0.

Learners will:
- Analyze a project-based learning project.
- Debate the role and relevance of WebQuests in Web 2.0 and in developing skills for the 21st century.
- Analyze the use of educational blogging in helping educators grow professionally and the impact and meaning blogs have in helping students develop understanding and skills for today.

Read
- “What WebQuests Are (Really)”
- “Revisiting WebQuests in a Web 2.0 World”
- “Using Web 2.0 to Breathe New Life into Old Projects”
- “Telecollaboration Part 2: Student Publishing Projects”
- Select and read an educational blog on cooperation, collaboration, and the use of Web 2.0 technologies

Write Journal Reflections
- Reflect on educational blogging and its impact on the online community and students

View Videos
- “Harnessing Your Students’ Digital Smarts”

Participate in Online Discussions
- Discuss WebQuests and their relevance today, in a Web 2.0 world.
- Participate in a peer review of project-learning reviews

Complete Activities and Assignments
- Finish the Project Learning Review Assignment
- WebQuests Activity

Session 4: Web 2.0 Technologies for Collaboration

In this session learners will explore technologies such as media sharing tools, blogging sites, wikis, online word processors, and social bookmarking sites, and determine how these sites can be meaningfully integrated into project-based learning.

Learners will:
- Discuss whether the Web 2.0 technologies they have explored help to develop cooperative skills and whether they are important to integrate into the classroom.
• Determine which Web 2.0 tools they would integrate into the classroom to develop cooperation skills.
• Review a Web 2.0 tool to determine how it could be integrated into the classroom to develop cooperation and collaboration.

Read
• “Cooperative Learning”
• “Communication and Collaboration 2.0”
• “VoiceThread Extends the Classroom with Interactive Multimedia Albums”
• “SKYPE in the Classroom”
• “The Way of the Wiki: Building Online Creativity and Cooperation”
• “Turbo-Charged Wikis: Cooperative Learning Embraces Technology”
• “Kids Create—and Critique on—Social Networks”
• “Tag—You’re Delicious!”
• “Bookmarking without Borders”

Write Journal Reflections
• Reflect on the Web 2.0 tools that may help develop students’ collaboration skills.

View Videos
• “Webloggss”
• “Project-Based Learning: Blog Action Day”
• “Google Docs in Plain English”

Participate in Online Discussions
• Discuss forming connections through Web 2.0.
• Share a specific Web 2.0 tool and how it may develop students’ collaborative and cooperative skills.

Complete Activities and Assignments
• Review another Web 2.0 tool and post More Web 2.0 Tools for Collaboration Activity.

Session 5: Developing and Managing Projects

In this session learners will explore resources for creating projects and will read about various issues and considerations related to using the Web in the classroom.

Learners will:

• Justify the importance of using of project learning in the classroom to help prepare students for the 21st century.
• Reflect on the classroom implementation of the use of Web 2.0 for developing cooperation and collaboration.

Read
• “How to Get Started with Project Based Learning”
• “Designing Your Project: Design Principles for Effective Project Based Learning”
• “Project Planning Form”
• “Assessment of Project-Based Learning”
• “What Makes a Good Project?”
• “Raising Our Standards – Developing Projects that Endure”
• “Code of Best Practices in Fair Use for Media Literacy Education”
• “Plagiarism in the Internet Age”
Write Journal Reflections
- Reflect on the Classroom Web 2.0 Implementation Activity

View Videos
- “Code of Best Practices in Fair Use for Media Literacy Education”

Participate Online Discussions
- Supporting the use and meaning of project learning.

Complete Activities and Assignments
- Classroom Web 2.0 Implementation Activity

Session 6: Cooperating Through the Use of Technology

In this session learners will review several classroom scenarios, rich with technology that promote cooperation and collaboration. They will complete the course project—a guide for developing cooperation through the use of technology. They will also reflect on how this course may impact their professional practice and complete a course evaluation survey.

Learners will:
- Review a case scenario of the successful use of online communication and collaboration and identify ways to make that a reality in their classroom.
- Create a Project Guide for Developing Cooperative Skills, integrating the use of Web 2.0 tools.
- Assess their learning in this course by comparing your prior knowledge and acquired knowledge.
- Analyze the learning experience in this course by reflecting about their professional goals and expectations.

Read
- “National Educational Technology Standards for Students 2007” (if necessary)
- NETS Implementation: Communication and Collaboration
- “A Day in the Life of Web 2.0”

Write Journal Reflections
- Reflect on acquired knowledge.
- Reflect on professional goals and expectations.

View Videos
- “Science and History Lessons Come from Restoring Ancient Ponds”

Participate in Online Discussions
- Discuss classroom scenarios incorporating Web 2.0 and collaboration.

Complete Activities and Assignments
- Course project: Project Guide for Developing Collaborative Skills
- Post-Course Evaluation Survey

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

Learners are expected to:

• Complete all activities and assignments.
• 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 is evaluated on a letter grade basis, and may be available for graduate credit. See graduate credit details pertaining to specific graduate credit institutions.

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