



# The Connecting Link

## **TechQuests: Teaching and Learning with Web and Mobile Technologies Site-based Participant Syllabus**

### **Course Description**

This course is designed to provide teachers the opportunity to understand and use web and mobile technologies to positively impact teaching and learning. As educational programs embrace emerging technologies, students can master academic content, apply 21<sup>st</sup> century skills, and learn how to find success in an increasingly digital world. Key tools such as cell phones, audio players, netbooks and tablets, virtual worlds, simulations, and video games will be critiqued, analyzed, and evaluated for classroom uses. Additionally, the WebQuest learning model will be explored and will include advanced search strategies, website evaluation criteria, and security. Information about the emerging technologies and tools will be discussed along with strategies and practical suggestions for classroom uses. Teachers will use these technologies to design and develop relevant learning experiences to reinforce skills across curricula. This course will also include examination of the ethics, safety, and security involved with the use of these technologies.

### **Course Prerequisites**

This course is recommended for K-12 school personnel who require a greater understanding of web and mobile technologies and 21<sup>st</sup> century skills and their impact on teaching and learning across curricula. Participants must hold a baccalaureate degree.

### **Text Books/Supplemental Reading**

Will be provided on the first day of class.

### **Global Goals of the Course**

To deepen and/or apply the content and skills of the teacher's existing professional knowledge base by meeting the following global goals of this course:

1. To explain and employ 21<sup>st</sup> century skills across curriculums (NBPTS 1; ISTE 1; InTASC 1, 3, 5, 7)
2. To appraise key technological tools and strategies for their impact on teaching and learning (NBPTS 1, 2, 3, 5; ISTE 2, 3; InTASC 1, 2, 4-8)
3. To employ emerging technology tools and the WebQuest learning model to design, develop, and evaluate relevant learning experiences for students (NBPTS 1, 2, 3, 4, 5; ISTE 1, 2, 3, 4, 5; InTASC 1-8)

4. To explain the ethics, safety, and security involved with the use of various technologies (NBPTS 1, 3, 5; ISTE 4, 5; InTASC 1, 5, 7)
5. To employ other educational professionals to improve student learning (NBPTS 5; ISTE 5; InTASC 9, 10)

### Instructional Objectives

By the conclusion of the course, each participant should be able to do the following:

1. Recognize and appraise the impact of Web and mobile technologies and strategies for their use in the classroom
  - 1.1 Identify, discuss, and explain 21<sup>st</sup> century skills
  - 1.2 Identify, discuss, and appraise the emerging net generation
  - 1.3 Examine how technology supports engagement and collaboration/networking
  - 1.4 Evaluate the impact of technology on differentiated instruction
  - 1.5 Describe societal and ethical responsibilities of digital citizenship
2. Examine and describe mobile technologies, tools, and strategies for use
  - 2.1 Appraise mobile technologies of cell phones, digital audio players, and netbooks/tablets
  - 2.2 Appraise virtual worlds, simulations, and video games
  - 2.3 Identify and explain strategies for use of emerging technologies
  - 2.4 Formulate use of emerging technologies within a content area or unit of study
3. Examine and describe the WebQuest learning model and strategies for use
  - 3.1 Recognize the characteristics of Web-based learning
  - 3.2 Describe advanced search strategies and related security issues
  - 3.3 Explain website evaluation criteria
  - 3.4 Explain copyright issues and digital intellectual property
  - 3.5 Formulate use of a WebQuest within a content area or unit of study
4. Develop relevant learning experiences and assessments that incorporate emerging technologies
  - 4.1 Design a learning activity and formative assessment that incorporates a technology tool examined
  - 4.2 Construct a WebQuest and summative assessment within a unit of study
5. Create, demonstrate, and judge the use of a WebQuest and emerging technologies within a content area or unit of study
  - 5.1 Demonstrate effective use of emerging technologies within learning activities and how they support teaching and learning
  - 5.2 Judge, support, and defend peer projects in the evaluation process
  - 5.3 Evaluate feedback and incorporate into learning activities and unit of study

## Teaching Methodology and Delivery Model

Content and instructor focus are on improvement of course participant expertise through the development of knowledge and skills related to transition planning and associated concepts.

1. Methodologies include instructor presentations, specific skill practice, discussions, audio-visual presentations, self-evaluation, project development, course readings, research/inquiry exercises, and the synthesis of new knowledge and skills with previously acquired skills/expertise in relation to transition knowledge and content.
2. The course is taught with instructor-participant and participant-participant feedback. Course content, activities, and assignments are organized into segments totaling 45 seat hours. Final projects are due within the two-week period immediately following class meetings.
3. Research-based content, presentations, and assignments are supported by textbooks and additional readings/handouts designed specifically for education professionals, educator resources in print and on the Internet, notes from instructor presentations, class activity work pages, and references.
4. Daily activities include a variety of research-based instructional approaches appropriate for adult learners. Class participants actively construct their own learning and make it personally relevant by acquiring and applying course knowledge/skills during hands-on practice and problem-solving activities, personal reflection, in-class presentations, whole-class discussions and activities, assigned readings, research/inquiry, projects, and collaborative work in various group formats. All are designed to make it possible for teachers and other transition-related personnel across the entire spectrum to learn the same basic content and skills with an emphasis on application to their own specific content area or grade level.

## Learning Assessment

Formative assessment of learning objectives for this course is conducted informally throughout the week via discussion, critiques, peer- and self-evaluations, journal entries, verbal and written instructor feedback, small-group sharing, and activities requiring the participants to make sense of new knowledge and/or skills within their realm of teaching. Additionally, three formative assessments are embedded within the course. Summative assessment for the course occurs in the form of a final project which requires each participant to synthesize class content and apply it within the teacher's specific teaching environment.

## **Compliance with National Board of Professional Teaching Standards**

The National Board of Professional Teaching Standards represents the highest level of professional achievement in the continuum of teacher professional development. There are five core principles (standards) which cover five aspects of professional educational practice: (1) commitment to students and their learning, (2) knowledge of subject matter and instructional strategies, (3) management and monitoring of student learning, (4) systematic reflection about the teaching profession to learn and grow from experience, and (5) collaborative participation in the educational learning community.

## **Compliance with International Society for Technology in Education (ISTE) Standards**

Effective teachers model and apply the National Educational Technology Standards for Students as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards: (1) facilitate and inspire student learning and creativity, (2) design and develop digital-age learning experiences and assessments, (3) model digital-age work and learning, (4) promote and model digital citizenship and responsibility, (5) engage in professional growth and leadership.

## **Compliance with Interstate Teacher Assessment and Support Consortium (InTASC) Standards**

The Interstate Teacher Assessment and Support Consortium's work is guided by one basic premise: An effective teacher must be able to integrate content knowledge with the specific strengths and needs of students to assure that all students learn and perform at high levels. All teachers should meet the following standards: (1) learner development, (2) learning differences, (3) learning environments, (4) content knowledge, (5) application of content, (6) assessment, (7) planning for instruction, (8) instructional strategies, (9) professional learning and ethical practices, and (10) leadership and collaboration.

## **Topics Agenda**

### **Topic One**

#### **Course Introduction**

Review of syllabus; expectations; course overview; review of NBPTS and ISTE standards; building our community

#### **21<sup>st</sup>-Century Skills and the Net Generation**

Examination of 21<sup>st</sup> century skills: The 3 R's and the 4 C's of critical thinking and problem solving; communication, collaboration, and creativity and innovation (Partnership for 21<sup>st</sup> Century Skills); the net generation and how this generation differs from previous ones; main sources for defining 21<sup>st</sup> century skills (Partnership

for 21<sup>st</sup> century Skills, ISTE, and NCREL and Metiri Group); support of content area standards; use of tools and strategies to achieve academic goals; beyond the automation of traditional activities

### **Emerging Technology in the Classroom**

Examination of how technology supports engagement; Web 2.0 collaboration and networking; impact of technology on differentiated instruction; societal and ethical responsibilities of digital citizenship; teacher and student beliefs about the value of emerging technologies; myth of online privacy; Internet archiving; online disinhibition; COPPA (Children's Online Privacy Protection Act); CIPA (Children's Internet Protection Act); decision-making and implementation; collaboration among stakeholders involved with emerging technologies (IT issues; educator issues)

### **Topic Two**

#### **Cell Phones**

Common objections to use of cell phones in education; changing viewpoints and other considerations; strategies for classroom use; practical suggestions; idea generation of use of cell phones within a lesson; cheating; cyberbullying; ground rules; site and district policies; digital literacy and etiquette

#### **Digital Audio Players**

Common objections to use of DAPs in education; changing viewpoints and other considerations; strategies for classroom use; practical suggestions; idea generation of use of DAPs within a lesson; ground rules; site and district policies; intellectual property; copyright laws; repositories; aggregators

### **Topic Three**

#### **Netbooks/Tablets**

Common objections to use of netbooks/tablets in education; changing viewpoints and other considerations; strategies for classroom use; practical suggestions; idea generation of use of netbooks/tablets within a lesson; one-to-one computing; ground rules; site and district policies; problem-based learning; constructivism; incorporation of Web 2.0

#### **Virtual Worlds**

Movement beyond social networks and creating content; common objections to use of virtual worlds in education; changing viewpoints and other considerations; strategies for classroom use; practical suggestions; idea generation of use of a virtual world within a lesson; social focus; educational focus; role-playing; Second Life and Teen Second Life; navigation; virtual worlds management; safety; privacy; cyberbullying; plagiarism; copyright issues; advertisement and product placement; costs for bandwidth and upgrades; ground rules; distance collaboration; simulations; structured vs. unstructured activities

## **Topic Four Gaming**

Movement beyond social networks and creating content; common objections to use of video games in education; changing viewpoints and other considerations; strategies for classroom use; practical suggestions; idea generation of use of a video game within a lesson; online/offline gaming; ground rules; role-playing; mini-games vs. complex games; ties to curriculum; game creation, development, collaboration, and sharing; bandwidth issues; Alice and GameMaker

### **The WebQuest Model I**

Common objections to use of WebQuests in education; changing viewpoints and other considerations; strategies for classroom use; practical suggestions; idea generation of use of a WebQuest within a lesson; discovery learning; constructivism; problem-based learning; critical thinking skills; visual learning; student readiness; cooperative learning structures

## **Topic Five**

### **The WebQuest Model II**

Exploration of self-directed vs. paired research; advanced search strategies; security issues; website evaluation criteria; synthesis of information; subject integration and crossover; search engine strengths and weaknesses; WebQuest develop template; WebQuest rubric development; copyright issues and digital intellectual property

### **Synthesis and Reflection**

Examination of emerging technologies within learning activities and how they support teaching and learning; peer review of lessons; providing feedback; support and critique; incorporating feedback; incorporating lessons into unit plan for final project and development

### **Course Closure**

Course wrap-up, final project, continued synthesis of agenda items 1 - 5 culminating in final project including reflection, application, and future recommendations

### **Final Projects**

Assignments/ assessments should reflect that each student is accountable for a high degree of learning; thus, an appropriate combination of group and individual assignments/assessments that can accurately determine an individual's achievement level is required.

In keeping with best instructional and assessment practices, this course requires participants to demonstrate synthesis and application of course knowledge in an applied final project linked to the instructional objectives of this course. Assessment of the project should not be limited to the quantity of work submitted but should carefully consider the quality and intellectual value of the work.

Final projects are due within two weeks of the end of class. Projects submitted during the third week “grace period” will have their grade reduced one full letter grade. No papers will be accepted past the grace period, and participants will, consequently, forfeit credit for the course. Papers are expected to be properly formatted and submitted to the instructor either in person or via mail or an email attachment.

Participants taking professional development unit (not-for-credit) courses must attend all scheduled class sessions and complete all formative assignments. However, they will be exempt from completing the final summative project unless otherwise noted. Proof of seat hours will be presented to the participants after completing course reflection via the student portal and all hours are met.

### Grading

Throughout the course, participants will engage in both formal and informal formative and summative assessments. Points are assigned based on a four-point criterion rubric specifically delineated for each assessment that can be further defined as follows:

**Distinguished:** The assessment is highly imaginative; demonstrates critical thought; is unique; shows substantial application to one’s own teaching or professional position; *goes above and beyond requirements*; is creative; demonstrates both breadth and depth of knowledge of transition-related subject matter; shows individual’s personality; is professional in presentation and appearance; and demonstrates considerable effort. The assessment is exceptionally completed and demonstrates clear understanding of the tasks, gives explanations, and shows how the assessment applies to a teaching/learning situation. The assessment meets the specific criteria delineated in “Distinguished” on the course rubric.

**Proficient:** The assessment is well-organized and complete; is effectively and clearly presented; demonstrates clear understandings; applies what has been learned to the author’s own classroom situation; clearly shows connections; is detailed; and is thoughtful and supported with ideas. A thoroughly completed assessment demonstrates that the participant shows awareness of the tasks, gives explanations, and shows how the assessment applies to a teaching/learning situation. The assessment meets the specific criteria delineated in “Proficient” on the course rubric.

**Basic:** This is the lowest passing grade. The assessment meets minimum requirements; includes general information but lacks descriptive detail; shows limited application to teaching/learning; and lacks originality. This denotes work that does not meet **all** aspects of standards for academic performance in a graduate-level course. The assessment meets the specific criteria delineated in “Basic” on the course rubric.

**Unsatisfactory:** The assessment is missing evidence or information; is sloppy and poorly organized; demonstrates only surface understandings; shows no evidence of application to the author's own teaching situation; is poorly written; and does not meet minimum standards for academic performance in a graduate-level course. The assessment meets the specific criteria delineated in "Unsatisfactory" on the course rubric.

The assessments for this course are weighted as follows:

Participation and Reflection	30%
Formative Assessments	30%
Summative Assessments	40%

Letter grades are based on 100 points possible and assigned based on the university grading scale.

### **Academic Honesty and Integrity**

All participants are expected to maintain academic honesty and integrity by doing their own work to the best of their ability. Academic dishonesty (cheating, fabrication, plagiarism, etc.) will result in the participant receiving a zero for that assignment or paper.

### **Americans with Disabilities Act Compliance**

In compliance with Section 504 of the Rehabilitation Act and The Americans with Disabilities Act, participants who have any condition, either permanent or temporary, which might affect their ability to perform in this class are encouraged to inform the instructor at the beginning of the first session. Reasonable academic accommodations, aids, and adjustments may be made as needed to provide for equitable participation.

### **Attendance**

Participants are required to attend all classes as well as participate in class discussions, small group activities, and projects. Absence from any part of the class will require that you withdraw from the class. You will need to contact The Connecting Link at (888) 550-5465 in the event this occurs.

### **Emergency Statement**

In the event of an emergency declared by the college or by The Connecting Link, we reserve the right to alter course plans and the attendance policy. In the event of an emergency, TCL will contact the instructor/participants with alternative educational plans for the course.

### **Late Work and Make-Up Policy**

Participants are expected to keep pace with in-class assignments and evening at-home assignments. If a situation arises in which an assignment cannot be



completed, the participant is expected to make arrangements with the instructor for the timely submission of such work. All work is due not later than two weeks after the class ends. Failure to complete all work in this time frame will result in an **incomplete** or a grade of **F** for the work, depending on the reason for the delay.

### University Compliance

Course content and instruction are bound by policies associated with the university granting academic credit for the course. Such policies include, but are not limited to: academic integrity and honor codes, institutional objectives and grade grievance procedures. These policies are located within the official academic catalogs which can be accessed through the university's official website.

For Valparaiso University Graduate School Student Learning Objectives please visit: <http://www.valpo.edu/gradschool>