



What is a "Benchmark Assignment"?

A "benchmark assignment" is a major assignment completed as part of the TIE program that demonstrates a student's attainment of certain competencies required by the ISTE Technology Facilitator and Illinois Technology Specialist standards.

Benchmark assignments must be included in every student's final portfolio, produced in TIE 592.

Courses that have Benchmark Assignments

Note: *There are 8 benchmark assignments including the final portfolio. Detailed descriptions and rubrics for evaluating the assignments are available by clicking on the course number.*

- **TIE 532: Network Design Project** — Develop a technical proposal, detailing a plan for the development and implementation of a new local area network, a new network segment, or a new network feature, appropriate for use in a school district.
- **TIE 533: Databased Decision-Making Project** — Analyze the use of productivity tools to evaluate artifacts and data for instructional decision making, and develop a prototype tool (e.g., spreadsheet, database) useful for decision-making in your instructional setting.
- **TIE 535: Technology-Infused Curriculum Project** — (1) Develop a unit of instruction using the selected model process and include all of the required elements and design and (2) implement Professional Development Experience based on your implemented unit.
- **TIE 542: Web-based Inquiry Project** — An individual or group project to create an instructional activity using the WebQuest format to manage student learning in a technology enhanced environment.
- **TIE 544: Hypermedia Project** — Creation of a substantive, interactive, computer-based hypermedia project relevant to curricular and student needs.
- **TIE 575: Professional Development Project** — Design a web site project for the school that will focus on the professional development needs of faculty.
- **TIE 592: Portfolio Project** — Develop an electronic portfolio demonstrating your knowledge, skills, and dispositions in relation to state and national standards for technology specialists/facilitators and performance outcomes outlined in the National College of Education conceptual framework.
- **TIE 593: Technology Use Project** — A comprehensive project focusing on how technology is currently being used in the school/district and then providing suggestions for the next steps

Benchmark assignments are outlined in the following pages.

TIE532 Benchmark Assignment

Network Design Project

Create a technical proposal, detailing a plan for the development and implementation of a new local area network, a new network segment, or a new network feature appropriate for use in teaching and learning. It will consist of the following:

- A complete description of the project and its purpose as it relates to the school's technology needs.
- A summary of the hardware and software components necessary for the project.
- A detailed budget of all anticipated expenses.
- A drawing detailing the topology of the project's installation.
- A discussion of how the project will be organized and administered.
- A discussion of how networked hardware and software will be secured.
- A description of procedures for appropriately managing copyrights, "fair use," and user safety as they apply to the project.
- A section on professional development activities for staff on the use of the proposed new arrangement or equipment.

Field Experience

In addition to the project, a field experience is required in which a functional network device or service is to be implemented in a working school network. The following list provides examples of the kind of network devices and services that might be considered: file server, web server, FTP server, key server, proxy server, switch, router, wireless access point. The device or service should be selected according to needs identified by the school's strategic plan, technology plan, or network management plan. This project will require consultation with the school's network manager and should be completed under his or her supervision. It is possible that the network device or service will function only temporarily or as a simulation at the discretion of the network manager.

Upon completion of the field experience, prepare a class presentation, identifying all hardware and software required involved in the activity. Include drawings, specifications, and a budget breakdown of any direct costs required to install the device or implement the service. Provide examples of how the device or service actually works. Identify how the device or service meets instructional needs of students and the professional development needs of faculty. Write a personal reflection of knowledge and skills gained from completing the activity.

This field experience accounts for one-third of the credit hours for this course and the product associated with it must be of sufficient significance as to warrant that credit.

Rubric for Benchmark Assignment - TIE532

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards (ISTE - TF)	Criteria and Indicators	Score
The Network Design Project includes:		
1A,B 5B,C 6D,E 7B,C	A complete description of the project and its purpose as it relates to the school's instructional and technology needs.	
1A,B 5B,C 6D,E 7B,C	A complete summary of the hardware and software components necessary for the project.	
1A,B 5B,C 6D,E 7B,C	A detailed budget of all anticipated expenses for the project.	
1A,B 5B,C 6D,E 7B,C	A drawing detailing the topology of the project's proposed installation.	
1A,B 5B,C 6D,E 7B,C	A discussion of how the project will be organized and administered.	
1A,B 5B,C 6D,E 7B,C	A discussion of how networked hardware and software will be secured.	
1A,B 5B,C 6D,E 7B,C	A description of procedures for appropriately managing copyrights, "fair use," and user safety as they apply to the project.	
1A,B 5B,C 6D,E 7B,C	A description of professional development activities for staff on the use of the proposed new arrangement or equipment.	
The field experience activity:		
1A,B 7B,C	Includes an analysis of how the device or service will extend or enhance the school's capacity to use instructional technology.	
1A,B 7B,C	Documents the role of the Network Manager in the activity's design and execution.	
1A,B 7B,C	Describes the steps and procedures of the proposed implementation process in sufficient detail to be understood by other students in the class.	
1A,B 7B,C	Includes drawings, specifications, budget sheets or any other documents required to properly describe the activity.	
1A,B 7B,C	Provides a description of how the device or service performs on the network	
1A,B 7B,C	Describes professional development activities required to support the use of the device or service by the school staff.	
1A,B 7B,C	Includes a written personal reflection on knowledge and skills gained as a result of the activity.	
Summary Score		
Comment:		

TIE533 Benchmark Assignment

Data-based Decision-Making Project

To fulfill the requirements of this course, students must complete a three part project.

The three parts are:

1. Investigate and summarize the practices and procedures your school district employs for student assessment data including collection, analysis, and use.
2. Develop and document a tool (see detail below), built with advanced features of productivity applications, that provides some decision-making support related to instructional planning or practice.
3. Develop and deliver a presentation to your peers describing the tool and its applications.

To create part one, students should identify the key staff members to be interviewed in order to collect the pertinent details regarding student assessment data and the way in which it is collected, analyzed, and used. A summary of each interview including questions and responses should be included as artifacts. The interviews should identify what standardized test scores, local assessments, and other related student assessment data are collected. Additionally, the interviews should identify which person(s) in the district work directly with the data, what tools are used for analysis, how the data and analytical assessments are reported, and how this process supports instructional planning and practice.

For part two, students should identify an element of the assessment data management practice which would benefit from the creation of a “tool” or “template” that would enhance the process and make the data more readily useful for instructional planning and practice. Such a “tool” should consist of any combination of worksheet (spreadsheet) templates, data base templates, and data collection components, though other elements may be included. The tool should be created and tested with sample data and reviewed by a potential user for its effectiveness.

Part three calls for a presentation (10-15 minutes) to be delivered to your peers that describes the tool developed for part two. The presentation should indicate how the tool is constructed, how it is to be applied to data, how it fits into the overall district assessment program, and how it can be applied to instructional planning and practice.

The products for this project will consist of a written summary report, including from part one, artifacts from the interviews, related documentation, and a table (organized by grade-level and indicating the type and source of assessment data) describing the district’s practices for assessment data management. The report will also include samples of the tool created for part two, examples of the tool’s application to sample data, and a review of the tool’s value as described by its potential user(s). Finally, a copy of the presentation from part three is to be included.

Rubric for Benchmark Project - TIE533

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards (ISTE - TP)	Criteria and Indicators	Score
The report product for part one (assessment data management practice) includes:		
4A,B,C 8D	A list of the key individuals interviewed	
4A,B,C 8D	Documentation of interviews (questions and responses)	
4A,B,C 8D	A summary table of district assessment data collection by type, source, and grade-level	
4A,B,C 8D	A description of data analysis tools used by the district	
4A,B,C 8D	A description of the responsibilities of staff working directly with assessment data	
4A,B,C 8D	A description of how and to whom assessment data analysis is reported	
4A,B,C 8D	A description of procedures by which assessment data and analysis are applied to instructional planning and practice	
The report product for part two (data management tool) includes:		
4A,B,C 8B,D	A description of the assessment data management practice the tool is intended to support	
4A,B,C 8B,D	A description of the tool's construction, including samples	
4A,B,C 8B,D	A description of the tool's application to sample data, including samples	
4A,B,C 8B,D	A description of the intended use of the tool in relation to other current practice	
4A,B,C 8B,D	A review of the tool's effectiveness described by a potential user, including recommended changes	
The report product for part three (presentation of results) includes:		
4A,B,C 8C	Effective presentation to peers of the district's assessment data management practice, including an explanation of data collected and its use	
4A,B,C 8C	Effective presentation to peers of the tool created to support assessment data management, including its construction and use of advanced application features	
4A,B,C 8C	Effective presentation to peers of how the tool works with sample data	
4A,B,C 8C	Effective presentation to peers of how the tool is intended to be used to support and improve instruction	
4A,B,C 8C	Effective presentation to peers of the user review of the tool's value	
4A,B,C 8C	A presentation document with sufficient detail and concept presentation to allow it to be effective if viewed separately from the oral presentation	
Summary Score		
Comment:		

TIE535 Benchmark Assignment

Project

To fulfill the requirements of this course, a three part project is required. The three parts consist of:

1. Development of a framework for a unit of instruction based on the Understanding by Design model, that is enhanced by the use of technology
2. Complete development of a sample lesson from that unit including lesson plans, technology based activities, materials development, instructional strategy development, and assessment processes

The unit of instruction must be one that contains content you will be able to teach this quarter (*N/A during summer term*). The unit and the fully implemented lesson must demonstrate ways in which technology tools and experiences can be integrated into the curriculum.

The benchmark assignment will be assessed with a multi part rubric that addresses each component of the project. A single over all evaluation of the project will result from the application of this rubric.

Submission of Benchmark Assignment (*TIE students only*)

Your final benchmark assignment must be submitted to your instructor via LiveText. Log on to LiveText, go to your TIE portfolio and select the TIE535 course. Complete the portfolio questions regarding your benchmark assignment, your reflection and the course evaluation, and upload your benchmark assignment.

You MUST “Send for Review”. When in your TIE portfolio, on the top menu bar, click on Send for Review. Type in Technology in Education in the text box, select the TIE program and then click *Submit for Review*. It’s very important that you complete this final step.

Once you have submitted for review, you can log out of the portfolio.

(If you do not have your TIE portfolio set up yet, I’ve included instructions in the course content section.)

Non-TIE students, email your benchmark assignment to your instructor. Be sure to include your last name in your file name when submitting.

Rubric for Benchmark Project - TIE535

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards (ISTE - TF)	Criteria and Indicators	Score
The plan for the unit of instruction includes:		
4B 6B	Summary of curricular and instructional context	
2B 7A	Goals and objectives for the unit	
3A,E	NETS-S and Illinois Learning Standards to be met for the unit	
1A 2A 3B 4C 6B,D,E	A description of the pedagogical approaches to be used in the unit including strategies to address diverse student needs	
2B,F	The essential understandings and key questions for students that will guide the unit	
3C 7A	A description of what students will know and be able to do as a result of the unit	
3C 7A	A description of any student produced products from the unit	
2F 4A,B	A table of proposed lesson plans for the unit including lesson goals, assessment strategies, and technology activities that may be integrated	
2A,B,E 3D 4C 8B	A description of the relationships between the unit structure and the frameworks for technology integration introduced in this course	
The sample lesson plan includes:		
4B 6B 7A	A description of the context for the lesson within the unit	
2F 7A	Goals and objectives for the lesson	
3A,E	NETS-S and Illinois Learning Standards to be met for the lesson	
1A 2A 3B,D 4C 6B,D,E	A description of the pedagogical approaches to be used in the lesson including strategies to address diverse student needs	
3C 7A	A description of what students will know and be able to do as a result of the lesson	
3C 7A	A description of any student produced products from the lesson	
2C 7A	A list of materials to be used in the lesson including paper, manipulative, classroom, and electronic resources	
2F 7A	A description of the activities for the lesson including integrated technology activities	
2F 4A,B 8B	A description of the assessment strategy and examples of associated rubrics or other assessment materials developed for the lesson	
1A 7A	A description of any prior knowledge and/or technology skill required of the participants	
2A,C 5A 7A	A list of materials to be used in the activity including paper, manipulative, classroom, and electronic resources	
Summary Score		

Benchmark Assignment – TIE542

Web-Based Inquiry Project

To complete the requirements for this course, students will create a WebQuest that involves learners in researching web and non-web based information sources while engaging students in a problem-solving activity in your classroom. The project consists of four parts:

1. A proposal describing the WebQuest's or Web-Based Inquiry Lesson topic and purpose
2. A storyboard describing the structure of the WebQuest
3. Web pages and related documents that make up the WebQuest
4. A reflection on the process

This is a project to create an instructional activity using the WebQuest format to manage student learning in a technology-enhanced environment. It includes but is not limited to:

- Research of online resources regarding the purpose and effective use of WebQuests
- Selection of a technology-related activity topic
- Design and creation of a WebQuest using all the required components
 - Title
 - Introduction (e.g., short introduction, advanced organizer, or overview)
 - Task (end-result of learners' activities)
 - Resources (description and location of online and other resources necessary for students to complete tasks)
 - Process (steps and strategies for learners to complete the task)
 - Evaluation (includes creating one or more student assessment rubrics)
 - Conclusion (e.g., closure, summary, extend to other experiences)
- Use of online resources such as search engines, templates for WebQuest lesson and assessment rubrics, email, and (optionally) asynchronous and synchronous discussion areas to design and develop your WebQuest.
- Reflection on the experience of developing the WebQuest activity and discussion of ideas for possible revisions to the activity based on your experience and on feedback from other participants in the course.

Students should use higher-order thinking skills to locate, analyze, evaluate, and transform the information into a form that can be applied the problem and demonstrates learning in the process. The WebQuest can be designed for one subject or can be interdisciplinary, and should extend over a period of one to two weeks in a class.

For this project, you will be paired with a Critical Friend to provide feedback and support during the development of your WebQuest. Pairings will be determined by sharing a grade-level or a topic when possible.

Proposal

Your proposal will include all of the following:

- WebQuest title

- Project Topic including grade level
- Audience (*Describe your students. Who are they? What is the grade level? What are their ability levels? Are there any students with special needs?*)
- Teaching Environment (*Classroom, computer lab, library? What kind of equipment will be needed will be available? Will you be teaching this alone? With a colleague? What management strategies do you foresee in the implementation?*)
- Instructional Strategy (*Of the various learning theories we have read which will influence your project design? Grouping methods? Collaborative activities? How will you meet the needs of diverse learners?*)
- Curriculum Alignment (*Where does the project fit in the curriculum and with existing course assessments*)
- Inquiry or Problem-Based Learning Objectives (*How will your project go beyond recall and develop higher-order thinking skills?*)
- Standards (*must include at least one content area goal from the Illinois Learning Standards and one NETS-S goal*)

The proposal items will be included in your WebQuest as a “Notes to Teachers” page.

Storyboarding your WebQuest:

During this development process you will be working on you annotated bibliography as well. This research into your topic may help as you design the different components and group tasks that emerge. More direction will be provided in class. Note the required parts listed below. Your storyboard will help you plan how all of those will fit together for your students.

Creating your WebQuest:

The development of the WebQuest will involve the following elements:

1. Include all required parts in the development of the WebQuests (as well as the Notes for Teachers page.)
 - The *introduction* includes the context and the background. And it should act as a “grabber” for your students to become involved.
 - A clear description of the *task* for the team. The description should be interesting and should also be concrete enough for students to understand what they must accomplish.
 - Information *resources* for meeting the task may include web resources, searchable databases, books, interviews (online and off), newspapers (online and off) and other sources that are appropriate.
 - The *process* section provides clear steps for students to complete, and provides any other needed guidelines and organizing direction you believe the particular audience for the project may require. What does the finished project to complete the task look like? What assessment procedures do the teams require? What assessment will you be using for their finished project?
 - A *conclusion* section that wraps up the inquiry, suggests extensions or additional applications of the solution(s) found, or ties it to later questions in the curriculum.
2. When building the WebQuest itself use the headings defined in *Building Blocks of a WebQuest* at <http://projects.edtech.sandi.net/staffdev/buildingblocks/p->

[index.htm](#). There are excellent examples here as well as clear definitions of what each section needs to include.

3. Use a provided html template or design your own using Microsoft Word, Netscape Composer or any web page authoring tool with which you are familiar.

4. Upload to the web per directions from your instructor.

A link to your final project will be added to the class webpage.

Reflection

Your final reflection (electronic and submitted as an email attachment) should include your thoughts on the experience of developing the WebQuest activity, ideas for possible revisions based on your experience, as well as feedback from your Critical Friend and from other participants in the class. As you write consider the role of WebQuests as an instructional tool and how it fits (or does not) with your vision of yourself as an educator.

Rubric for Benchmark Project - TIE542

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards (ISTE - TF)	Criteria and Indicators	Score
The WebQuest Proposal (Notes to Teachers) includes:		
3A	A Title and description of the Topic and its relation to the curriculum.	
2A 3A	Description of the Audience .	
3A,E	Description of the Teaching Environment .	
3C 7A	Summary of Instructional Strategies to be used including Inquiry or Problem-Based Learning .	
3A,E	NETS-S Technology Standards that will be addressed.	
3A,E	Illinois Learning Standards that will be addressed.	
Design and Planning include:		
2A 3A,D 7A	A Storyboard for the WebQuest activities indicating how they are linked.	
2A 3A,D 7A	Clear and concise Directions and Navigation tools.	
2A 3A,D 7A	Well designed Web Pages .	
5A	A Bibliography of resources for research and design.	
The WebQuest product provides:		
2A,B 3C,D 7A	A compelling Introduction that draws students to the project by connecting their interests and prior knowledge with a well stated Inquiry or Problem .	
3C,D 7A	A clearly stated Task which describes what the student is to know, understand, or determines as a result of participation in the WebQuest.	
3C,D 7A	A description of the Process which identifies the sequence of activities, how they are to be performed, and what the product of each activity should be. The Process should reflect the design structure of the Storyboard .	
3C,D 7A	An adequate number of Resources so as to provide sufficient information and an appropriate range of perspective regarding the topic(s) being researched.	
3C,D 4A	An Evaluation component that clearly states what is required to meet the expectations and requirements of the project. This may include rubrics or other assessment tools.	
3C,D 7A	A process by which students can report their Conclusion as it relates to the Inquiry or Problem presented in the Introduction	
The Reflection:		
5A,B	Describes the knowledge and skills acquired in the development process	
5A,B,D	Describes the role of the Critical Friend and the ways in which their interaction contributed to the process	
Summary Score		
Comment:		

Benchmark Assignment – TIE544

Hypermedia Project

Hypermedia Project

To fulfill the requirements of this course, students must complete a three part project.

The three parts are:

1. Design a substantive, interactive, computer-based hypermedia project relevant to curricular and student needs.
2. Develop the project into a hypermedia product using hypermedia tools as required for the course work.
3. Present the project to the class evaluating its place in the curriculum and its quality as an instructional tool.

For part one, students will select a curricular area and related school/district/state learning standards around which they will develop their project. Through the preparation of a concept map (or flowchart) and storyboard completed prior to the development of the actual hypermedia project, students will apply instructional design principles in creating the hypermedia project.

For part two, students will create the project documents using the hypermedia productions tools selected for the class. Elements of the hypermedia project will reflect the skills students have attained and techniques they have acquired through the course work. The hypermedia project must include at least 15 screens and hypermedia elements such as non-linear navigation, animation, images, sound, and a video clip. Inclusion of a bibliography will demonstrate knowledge and application of copyright/fair use.

For part three, in collaboration with others enrolled in the course, students will develop a rubric for self-assessment of the hypermedia project including elements such as organization and accuracy of content; screen layout; navigation; use of color, text, multimedia; and interactivity appropriate for identified audience (demonstrating awareness of learner characteristics). As part of the presentation of the project, students apply the rubric to their work as part of a written reflection on the process.

Careful citation of sources will be required in order to respect copyright laws in creating the hypermedia project. A summary of graphic design principles and copyright laws/Fair Use considered in developing the hypermedia project will be completed, again as a separate, related course assignment.

Rubric for Benchmark Project - TIE544

Student Name: _____

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards	Criteria and Indicators	Score
The project is related to curriculum and identified learning standards.		
2A 3D,E 7A	Project presents a clearly defined instructional purpose	
3A,D,E	Project identifies related ISBE/ISTE learning standards	
2A 3A,B,D	Project is appropriate for identified learner group(s)	
2A 3B,D 7A	Project has applicable use in an instructional setting	
Content is clearly presented and reflects good instructional design with clear structure and purpose.		
2A 3D,E 7A	Project appropriately meets its instructional goal(s)	
2A,B 3C,D	Project reflects good instructional design	
2A,B 3C,D	Project includes interactive components which engage learners with the content	
2A,B 3C,D	Project employs clear and appropriate navigation options	
2A,B 3C,D	Project purpose is clear to the user	
Multimedia elements including digital images, digital video, and digital audio are present and appropriate.		
2C,D 7A	Project appropriately includes digital images	
2C,D 7A	Project appropriately includes digital video	
2C,D 7A	Project appropriately includes digital audio	
2C,D 7A	Project blends digital media in an effective manner	
A bibliography citing all resources used for the project is present and properly annotated.		
6A,B,C,D	Project includes bibliographic section with citation references cited from WWW and non-WWW sources	
6A,B,C,D	Project demonstrates knowledge and application of the Fair Use aspects of the current Copyright laws.	
5D 6A,B,C,D	Projects cites, where appropriate, individuals who contributed to concepts and design	
The project represents original thought, careful construction, and an overall impression of professional quality.		
2A,B 3D	Project shows original thought in its design and construction	
2A,B 7A	Project represents the scholarly work of a professional educator in its development and pedagogical approach	
2A 3A 7A	Project has clear value to enhance the school environment	
Summary Score		
Comment:		

TIE575 Benchmark Assignment

Professional Development Unit Project

To fulfill the requirements of this course, students must complete a three part project applicable to their current school environment. The three parts are:

1. Design a web-based professional development project.
2. Develop and plan the execution of the web-based professional development.
3. Implement the web-based professional development project by creating the associated web pages and delivering them to faculty members.

To create part one, students should:

- Select an identified faculty professional development need
- Explore strategies that facilitate adult and continuous learning
- Investigate one or more themes related to the integration of technology for effective student learning
- Involve faculty members at critical milestones in the development and use of the website:
 - Planning
 - Testing
 - Implementation
 - Evaluation
 - Recommendations for improvement

For part two, students should create a planning document which includes the following elements:

- An *introduction* that provides an overview of the web site and its purpose
- Description of the target learners and their needs
- Description of subject matter or content
- A listing of the expected prerequisites for successful use of the curriculum
- A list of specific learning objectives
- An instructional plan (describing how the web site will be used by the faculty members), including a list of the equipment and materials necessary
- A plan for assessment of learning and for evaluation of the web site
- A discussion of how the web site will include adult learning theory
- Contact information for the author, and acknowledgements of sources utilized in building the web site

In the third part, students will create a professional development web site. The site should:

- Include at least 10 pages (one of which will be the planning document, called "Guide to this Web Site")
- Apply quality web page design criteria including a consistent "look and feel" based on an underlying page template
- Include consistent and functional navigation structures
- Include text, tables, databases, graphics, and multimedia, as appropriate
- Address social, ethical, and legal issues, as appropriate

- Refer to associated state and federal guidelines for technology integration
- Provide examples of how the skills and/or knowledge faculty members acquire from this experience can be applied to instructional practice
- Identify, as appropriate, opportunities for faculty to further pursue this area of professional development
- Include a bibliography of professional literature (web- and print-based) relevant to the topic
- Include a feedback form so that users of the web site can provide feedback to the developer

Students will demonstrate and discuss their final projects in class, allowing class members an opportunity to access and use the final web site product. The instructor will be provided with digital copy of all students' work.

Rubric for Benchmark Project - TIE575

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards	Criteria and Indicators	Score
The design component:		
1A,B 2A 5A,B	Identifies a need based on teacher skills and/or experience and its significance as related to students	
5A,B 8C	Incorporates adult learning theory	
3A,E	Project relates identified need to Technology Plan goals, NETS-S, NETS-T, and Illinois Learning Standards where appropriate	
8C,E	Shows evidence of faculty involvement at the indicated milestones	
The planning document:		
5A 7C 8E	Provides an introduction to the project explaining its purpose and its goals	
5A 7C 8E	Identifies the audience of teachers and/or staff it addresses	
5A 7C 8E	Describes the subject matter of the activity and its place in the curriculum	
5A 7C 8E	Identifies the prerequisite skills for successful use of the project web site	
5A 7C 8E	Provides a list of the specific learning objectives for the users of the site	
5A 7C 8E	Includes an instructional plan for implementation including equipment and material requirements	
5A 7C 8E	Provides a plan for assessing the learning of the site users and evaluating the site's success	
5A 7C 8E	Offers evidence of the application of adult learning theory	
5A 7C 8E	Includes contact information for the author and acknowledgements of sources and contributions utilized in building the web site	
The professional development web site:		
1B 5A,B,C,D	Employs home page and consistent and functional navigation links among at least 9 additional pages	
1B 5A,B,C,D	Demonstrates quality web page including consistent "look and feel" based on an underlying template	
1B 5A,B,C,D	Makes appropriate use of graphics, media, and visual presentation to explain concepts	
1B 5A,B,C,D 8B	Describes how the embedded concepts and ideas can be applied to instructional practice	
1B 5A,B,C,D	Provides links to appropriate outside resources including state and federal guidelines, using supporting links to enhance user's learning	
1B 5A,B,C,D	Includes sufficient resources to fully explore concepts	
1B 5A,B,C,D 8C	Provides a feedback opportunity for site users	
1B 5A,B,C,D 6A	includes a bibliography and cites, where appropriate, individuals who contributed to concepts and design	
Summary Score		
Comment:		

TIE592 Benchmark Assignment

Portfolio Project

To fulfill the requirements of this course, students must complete a four part project, creating and presenting an electronic portfolio of your work. The portfolio should demonstrate your knowledge, skills, and dispositions in relation to state and national standards for technology specialists/facilitators and performance outcomes outlined in the National College of Education conceptual framework. The portfolio is to include at least one artifact for each of the ISTE Technology Facilitation Standards.

The four parts of the portfolio are:

1. A statement of your philosophy of education including a belief statement about the role of technology in teaching and learning.
2. Reflections on each artifact as they relate to your growth and development.
3. An annotated bibliography of readings related to the Technology in Education program.
4. Presentation of the completed portfolio in a group setting where your growth and achievements are discussed

Details regarding each of the steps are provided below:

Part 1. The statement of your philosophy should:

- clearly demonstrate its connections to fundamental educational philosophies as presented and studied during TIE coursework.
- take into account the need to address learning style, student needs, and diversity
- address your beliefs on how technology relates to lifelong learning and continuous growth.

Your belief statement should:

- note various forms of technology (multimedia, word processing, spreadsheets, etc.) and how each can be used to improve and enhance teaching and learning.
- provide examples of what these uses of technology look like in an instructional setting.

Include in this section:

- at least three references to professional literature and/or research that influenced your thinking and judgment.
- a narrative describing specific examples of personal and/or professional growth and future goals associated with the development of your philosophy and beliefs.

Part 2. The incorporation of artifacts in the portfolio should include:

- eight or more artifact documents created as part of the TIE program coursework. The artifacts should include various forms of technology (multimedia, word processing, spreadsheets, etc.).
- tables indicating the alignment of the artifacts with ISTE-TF and ISBE-TS standards.
- a narrative reflection for each artifact indicating:
 - i. how it fits into instructional practice.
 - ii. how it meets the indicated standards as well as the NCE learning outcomes.
 - iii. relationship between the artifact and professional literature and/or research.
- a CD or DVD containing the artifacts and supporting documents, philosophy and belief statements, reference list, and bibliography managed by a navigational structure that provides access to each component. The organizational structure should reflect a logical design and professional appearance.
- a bound package that includes the CD or DVD and all printed documents related to this project to appropriately reflect the professional quality of the product.

Part 3. The annotated bibliography should:

- reference professional readings identified across courses in the TIE program.
- represent a beginning professional library that can support technology facilitators and specialists in their own professional growth as well as in the work to support others.
- follow the APA format unless an alternative format is approved by the instructor.

Part 4. The presentation of the portfolio includes demonstration of at least two artifacts in a group setting, including a clear and enthusiastic discussion of the associated reflection on personal and/or professional growth related to the creation of the artifacts.

Rubric for Benchmark Project - TIE592

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards (ISTE - TF)	Criteria and Indicators	Score
The statements of philosophy and belief include:		
2A,F	Connections to fundamental educational philosophies and theories	
3B 6B	Appropriate concern for learning styles, student needs, and diversity	
3A 5A	Consideration of how technology relates to lifelong learning and continuous growth of education professionals	
2A 3B,C	Discussion of how various technologies can enhance teaching and learning	
2B,C,D	Descriptive examples of “best practice” related to instructional technology	
5B	A narrative describing examples of personal and/or professional growth and future goals	
The structure and content of the portfolio includes:		
2B 3E	References to professional literature in belief statement and reflections	
1B 5A,B	Eight or more artifacts reflecting growth in knowledge, skills, and/or dispositions	
5A,B	Tables aligning the artifacts to the ISTE-TF and ISBE-TS standards	
5D	A narrative reflection for each artifact descriptive of its significance in the portfolio	
5D	A narrative reflection for each artifact that references ways in which the artifact impacts (P-12 or your) students’ learning	
5D	A statement for each artifact that discusses how it demonstrates how you have met relevant standards	
5D	A CD or DVD containing the artifacts documents and providing structured menu-driven access to them	
5D	An electronic portfolio demonstrating professional design as well as demonstrating your personal dispositions and teaching style	
The annotated bibliography includes:		
5B	References to professional reading from the TIE program	
5B	Appropriate and sufficient elements to provide a beginning professional library	
6A	Proper APA format and structure	
Presentation of the portfolio includes:		
8C	Clear and enthusiastic presentation of two artifacts in a group session	
8C	Readiness to answer questions regarding development of portfolio and connection of artifacts within the portfolio to ISTE and ISBE standards	
Summary Score		

TIE593 Benchmark Assignment

Technology Use Project

To fulfill the requirements of this course, students must complete a five part project, taking on the role of consultant to a school district. The five parts are:

1. Examine technology use in a school district
2. Identify an issue for further study
3. Review related literature and research
4. Gather data relevant to the issue
5. Recommend actions

Details regarding each of the steps are provided below:

- Part 1. Investigate and summarize the historical development of technology use in the school district, focusing particularly on the last five years. This is a fact finding activity intended to give an accurate picture of where the district is with technology, how it got there, what issues and individuals have been influencing factors, and how the district stands in relation to its technology plan and similar districts.
- Part 2. Determine a specific issue for further investigation. Analysis of the information gathered for part one, along with informal interviews conducted with key people should indicate some areas where concern exists. These may be initiatives that have struggled, failed to develop, or lost momentum after initial success or they may be opportunities to investigate and integrate new technologies. From this analysis, a key question or questions should be formed that will guide the activity for parts three and four.
- Part 3. Review the literature and research reports related to elements of the key question you are investigating. Determine what is currently regarded as "best practice" related to the associated issues and find examples of conditions for success. An annotated bibliography will be required.
- Part 4. Make observations in the school(s) connected to the key question you are investigating. Collect and analyze data through surveys, observations, interviews, etc., shaping these instruments to fit the circumstances and needs of the investigation. Fifteen hours should be devoted to data collection, thus data collected should be of sufficient volume and diversity so as to allow for meaningful results. Following appropriate analysis, a summary of the findings is to be prepared using charts, tables, and narrative description.
- Part 5. Make recommendations regarding actions to be taken related to the key question being investigated. Include a summary of the data analysis and results and the way in which they lead to the conclusion that the recommendations are appropriate. The recommendations are to be prepared for presentation to the School Board for consideration and should indicate what actions should take place. The recommendations should be supported by references to the literature on best practice and related research. Optionally, you may include a timeline for execution of the recommendations, a description of the expected outcomes, identification of who will be responsible for implementation, and an estimate of any associated cost.

The report should include an Executive Summary, a narrative summarizing each of the parts one through four and, as appendices, blank samples of the data collection instruments that were used, presentation of data used for analysis and copies of other related artifacts from the investigation. The report should follow

Modified: 12/15/2010

the APA format (including the annotated bibliography) unless an alternative format is approved by the instructor. **This field experience accounts for one-third of the credit hours for this course and the product associated with it must be of sufficient significance as to warrant that credit.**

Rubric for Benchmark Project - TIE593

Scoring: 0 – element not present or unacceptable; 1 – element present but lacking in depth or quality; 2 – element present and appropriate; 3 – element exceeds expectations

Standards (ISTE - TF)	Criteria and Indicators	Score
Summary of historical technology use in the school district includes:		
8B,D,E	Narrative summary of the district's technology development prior to the last 5 years	
8B,D,E	Narrative summary of the district's technology use during the past 5 years	
8B,D,E	Summary of the formation and goals from the current Technology Plan	
8B,D,E	Narrative summary of the most significant influences in the district's current technology development (issues, individuals, etc.)	
8B,D,E	Narrative comparison of the district to similar local district regarding technology use	
Identification of a specific issue for further investigation includes:		
4B,C 8B,D,E	A list of the key individuals interviewed informally	
4B,C 8B,D,E	Artifacts of interviews (question and responses)	
4B,C 8B,D,E	Summary of issues considered for further investigation	
4B,C 8B,D,E	Statement of Key Question(s) identified for further investigation	
Review of literature and research reports includes:		
2B 3A,E 8B,D,E	Annotated bibliography of literature and research that was reviewed	
2B 3A,E 8B,D,E	A narrative summary of research findings related to the Key Question(s) being investigated	
2B 3A,E 8B,D,E	A narrative summary of currently understood "best practice" relative to the Key Question(s) being investigated	
2B 3A,E 8B,D,E	An evaluation of the conditions that must be in place for the district to successfully address the Key Question(s)	
Investigation of the Key Question(s) includes:		
2B 3A,E 4B,C 8B,D,E	A log and narrative summary of observations performed	
2B 3A,E 4B,C 8B,D,E	A narrative summary of the data collection techniques employed in the investigation	
2B 3A,E 4B,C 8B,D,E	Summary presentation of the collected data in appropriate narrative and graphical form	
Recommendations to address the Key Question(s) include:		
2B 3A,E 6A,B,C,D,E 8B,D,E	An executive Summary briefly describing the entire process	
2B 3A,E 6A,B,C,D,E 8B,D,E	A narrative summarizing the data analysis results and associated conclusions	
2B 3A,E 6A,B,C,D,E 8B,D,E	Description of recommended actions, as supported by data analysis and literature review. (You may also include several of these optional items: timeline, expected outcomes, assignment of implementation responsibility, and estimate of expected cost.)	
2B 3A,E 6A,B,C,D,E 8B,D,E	Appendices with samples of data collection instruments, raw data, and copies of other related artifacts	
Summary Score		
Comments:		

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