



National-Louis University Technology in Education 557 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.
- An appendix that will include a model Request for Proposal (RFP) document for the project that may be used by the school district to solicit bids for acquisition and installation.

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 - TIE557

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.	
1A,B 5B,C 6D,E 7B,C	A properly structured Request for Proposal (RFP) document that meets the criteria of the school for securing bids	
The field experience activity:		
1A,B 7B,C	Involves the installation or implementation of a device or service in a working school network.	
1A,B 7B,C	Includes a 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 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:		