

PHASE 5: Educational Computing and Technology Leadership Certificate

Independence USD 446 Technological Fluency Phase Project

Made Possible Through a Grant From Funds for the Improvement of Education

Name: _____ Building: _____

Please fill in the blanks above and save as "Phase 5 – Cover". Include the cover, along with your work products and process discussion. Save all items in a folder named "Phase 5" in YOUR H: drive (Home Directory) for evaluation. Use a file naming convention that easily identifies which phase and scenario each item is associated with. Finally, e-mail btincher@indyschools.com with a note that Phase 5 is ready for evaluation. Satisfactorily completed phases turned in by noon on the Wednesday before each monthly payroll cutoff date will result in a positive e-mail notification on or before the payroll cutoff date. Incomplete phases will result in an e-mail with recommendations for improvement. Phases may then be submitted for a second and final assessment.

Organization and Quality of the Work Product

- _____ Do the overall work products provide a reasonable solution to the scenarios?
- _____ Are the work products organized appropriately and is the format engaging?
- _____ Do the work products contain errors?
- _____ Do the work products effectively communicate its solution?
- _____ Are the solutions presented by the work products easily understood?

Process Skills Used to Create the Work Product

- _____ Is there evidence that the corresponding performance indicators were used to derive a solution?
- _____ Is there evidence of instantiation of the corresponding performance indicators?
- _____ Is there evidence for transferability of the corresponding performance indicators to other scenarios?

RECOMMENDATIONS FOR IMPROVEMENT

Scenario 1: _____

Scenario 2: _____

Scenario 3: _____

SCENARIO ASSESSMENT

PHASE 5 – Educational Computing and Technology Leadership

To satisfactorily complete the scenarios for Phase 5, Educational Computing and Technology Leadership, your work products should demonstrate use of the following indicators in developing your work product solutions:

Use technology resources and productivity tools to facilitate technology-based learning experiences using multiple learning contexts and content areas:

1. Demonstrate a sound understanding of technology operations and concepts.
 - Implement and use a synchronous or asynchronous distance learning delivery system.
 - Use and manipulate networking software to effectively manage the operation of a LAN.
2. Design and model instructional strategies where student learning is maximized through technology integration in the classroom.
 - Describe the characteristics and uses of Web-based authoring tools and evaluate their appropriateness for classroom applications and for educational Websites.
 - Demonstrate methods for teaching multimedia or hypertext authoring tools to colleagues and students.
 - Demonstrate methods for teaching uses of media-based tools such as television, audio, print media, and graphics.
 - Summarize major research findings and trends related to the use of technology in education to support integration.
3. Apply technology to facilitate a variety of effective assessment and evaluation strategies.
 - Design a research project that includes analyzing the use of a specific technology in a K-12 environment.
 - Identify and use reliable hardware/software evaluation tools to describe evaluation criteria for hardware/software. Use evaluation findings to recommend modifications in technology implementations.
 - Document and assess an activity involving implementation of a technology-enhanced instructional program or staff development program.

- Document and assess experiences in implementing a WAN or LAN with Internet connectivity.
4. Use technology to enhance productivity and professional practice.
- Use and apply a computer authoring and/or programming environment to create computer-based lessons/products for others to use.
 - Apply instructional design principles to develop substantive interactive multimedia computer-based instructional products for others to use.
5. Implement procedures, policies, planning and budgeting for technology environments.
- Participate in the development and evaluation of a district technology plan that addresses the following issues: staff development, district wide training, funding issues for equitable access, assessing the effectiveness of the policies, recommendations for purchasing instructional software to support and enhance the school curriculum, recommendations for purchasing technology systems, organization, management, and security of hardware and software, and troubleshooting and maintaining various hardware/software configurations. Specifically, write a section of the plan for one or more of the following technology plan components: staff development programs, network configuration plan, computer software, acceptable use policies, computer software and management, hardware specifications and maintenance, purchasing and acquisition, funding, facilities planning, and security.

Important Note: Your final work product must include a PROCESS DISCUSSION in which you describe how you completed each scenario (materials, technology used, steps taken, etc.) Save this as "Phase 5 – Process Discussion" and place in the "Phase 5" folder along with your cover sheet and work materials. Please include your full name and building at the top of the PROCESS DISCUSSION.

Scenario 1

Develop and present staff development workshops to provide instruction on two of the following topics. Each workshop should be at least 90 minutes in length and the presentation and delivery format should model the use of teaching with technology:

- Demonstrate methods for using Web-based authoring tools and identify their appropriate use for classroom learning activities.
- Demonstrate methods for using multimedia authoring tools and identify their appropriate use for classroom learning activities.

- Demonstrate methods for using media-based tools such as video, audio, print media, and graphics and identify their appropriate use for classroom learning activities.
- Summarize major research findings and trends related to the use of technology in education to support integration.

Note the words “should model the use of teaching with technology.” The use of a projection device or of the Internet in and of itself does not constitute “teaching with technology.” Please utilize integrated presentations, hands-on learning, multi-media, and include your own works (video – from digital camera, scanner, or camcorder; audio, and or graphics). The project administrator or a designate must be present for one of the workshops. Contact btincher@indyschools.com to schedule a workshop visit.

Scenario 2

Set up a course or unit of instruction on the indyschools.com web site. Your web-based course should provide a course outline, materials on-line, and links to on-line resources. Set this up as a course you would teach to other professionals, complete with all of the links needed for an entire semester class. The first few weeks of class should have actual course activities that are linked to the course web page, but additional weeks may just be “dead links”.

Scenario 3

Develop a budget proposal for technology. This proposal’s title is “Recommended Technologies for the Integrated Classroom”. Given the need to *truly* integrate technology into the teaching/learning process, what would you recommend as a minimum for a classroom? Your proposal should include at least one of each of the following items: a computer, a camera, a printer, and software needs list. The final proposal should cover at least the following items:

- Abstract (overview) of your recommended technologies;
- Budget with estimated costs for your proposal - include both one-time and ongoing expenses;
- Printout of a Dell online session where you have gone to the Kansas K-12 Educational pricing area and configured a computer system or systems;
- Item-by-item comparison of other like items or different brands to each item in the final proposal. Compare at least two other choices each of the final choices and explain how the final decisions were made (based on cost, features, compatibility, etc.)