KTI Technology Professional Development

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GDIT 709

Instructional Program Development

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# Description of Program

The faculty of KTI does not have adequate training available for the integration of technology into their classrooms.  Technologies can include projectors, computers and other equipment.  Online resources, such as blogs, wikis, Google documents, and other resources are not being used.  Instructors are either unaware of their existence or and unsure how to use them in order to enhance their instruction.

* Instructors that do not receive training in new technologies feel stress or anxiety in the classroom.
* Instructors will not use or test new techniques if not shown examples
* Instructors do not have the time to explore or experiment

Training modules will provide concrete examples of how to use technology in the classroom and in lab settings.  For example, the training may provide an example of how to use a wiki in a Dental or Medical lab. These trainings will be conducting during faculty in-service days which occur once a quarter. Instruction modules will be also be made available on the local server so instructors can access them at their leisure. One on one help with personalized integration of technology will be available to the instructors.

The purpose of the program is to provide the following:

* Needs assessment (see index) will be conducted in order to identify the current use of technology and where trainings need to be developed. Three components will be addressed:
  + Desired Status
  + Actual Status
  + Gap between actual and desired status
* Training on current and new technologies to be used in and out of the classroom
* Support for current and new technologies provided via online modules, wikis and discussion boards
* Specific in-class examples will be provided in order to create starting points for each instructor. Information from each class taught will be gathered and analyzed; they will then be evaluated for opportunities to introduce usable technology into the classroom.

## Population

* 30+Full Time Faculty, 15+ Adjunct Faculty, ages 26-55
* Faculty should be knowledgeable in their specific program. They should have general teaching abilities and at least 3 years of experience in their field.
* Educational background varies. The range is from certificate programs to Master of Arts degrees. A majority of the program instructors do not have Bachelor’s degrees. Most do not have any professional training in instruction. General Education instructors are required to have at least a Bachelors degree.
* Most instructors teach in either lab settings or lecture style classes. Labs can include medical, dental, culinary or technical. Projectors are available, but rarely used. No smart boards are available for use.

## Similar Programs

Professional development training programs involving technology in the classroom can be found in many schools across the United States, from K-12 environments to Higher Education. A simple search online can bring up the many schools that provide technology training for their faculty. Indiana University School of Education found that the more that technology advanced the more stress it caused for their instructors. “Studies also show that professors are more satisfied with technology if they have received training. In addition, professors are more likely to accept technology training if provided with an incentive” (Rhodes & Goveia 2002). Ball State University has developed ongoing strategies to keep their trainings updated and relevant. They create surveys, keep the faculty informed and provide different methods of instruction (Putman & Wills 2002).

While the curriculum may vary from program to program, the common theme is to provide hands on training, on-on-one support and online options. Keeping the communication open and gathering feedback from the faculty is also vital component to making the program a success.

## Goals

* Reduce stress and anxiety about using new techniques in the classroom
* Provide a online training platform to present modules with convenience in mind
* Introduce new technologies into the classroom and lab setting that makes sense and aids instruction

## Program Personnel

The program will start off small; however I think in time it will need to grow (depending upon how many schools will in the picture at the time).

* Developer/Designer: The developer/designer will be the primary role in this program. They will perform the needs assessment, designing, development of all the programs. They will also analyze the program for problems and alter the program if needed. The person in this role must have the educational background and appropriate experience to effectively create a faculty technology program.
* Facilitator: This role may be one in the same with the Developer and Designer at first. After the program expands, the two positions should split. The facilitator should be able to lead a classroom and understand the program completely in order to provide successful instruction. They will also plan the trainings and track the progress and attendance of the learners within the trainings.
* Administrative Advisor: This role will be held by the Dean of Education. They will oversee the operation and ensure that the modules are covering the objectives.

# Instructional Strategy

The delivery system preferred by my institution would be in person and through a collection of online modules contained on the local server. The course structure will be flexible to allow any teacher at any time to join the trainings. There will be no prerequisites. Communication is encouraged throughout the trainings. Even if the learner is viewing an online module, they will be given the opportunity to send feedback through an online form. The trainings will present a variety of topics. Some activities will have strict rules and regulations; some training will require the instructor to think creatively. The trainings will be a mix of group discussions and independent activities.

Program will be held on a flexible basis, allowing for more important or critical topics to be discussed. Sometimes rules and regulations may change in the education field, so flexibility is a must.

Goals/Objectives contained within courses/modules/sessions

* Increase awareness of the variety of technological solutions available to staff and faculty
* Provide techniques and strategies to integrate technology effectively into the curriculum
* Develop staff proficiency in technology
* To enhance student achievement through the effective use of technology in and out of the classroom
* Promote effective and efficient use of technology by faculty and staff

# Prototype

## Outline of Instruction

Faculty in-service trainings will be held quarterly throughout the year on a Friday chosen by the Dean of Education. The training will be held from 8:00-3:00 with a half hour lunch. Three hours of the training will be devoted to technology training (as follows). The other three will be devoted to theory and research (topics will be selected by the DOE and unrelated to technology training):

**Quarter 1   
November 4, 2011  
Google email and applications, Powerpoint presentations**

*Description of module: Recently KTI switched their email server over to Google. Since then, they have been using the many services that Google has to offer to manage different aspects of the school. This module will give an overview of Google and all of its features. The second part of the session will be devoted to creating a simple PowerPoint presentation using pre-existing information and templates.*

*Upon completing this module, the learner will know:*

* How to use the different aspects of Google Email
* How to use GoogleDocs
* How to use the calendar to schedule and reply to different events at KTI
* How to create and save a simple PowerPoint presentation

**Quarter 2  
March 2, 2012  
Online classroom/grading systems**

*Description of module: KTI uses an excel spreadsheet in order to officially track grades. However, students are not able to access grades or important documents outside of the classroom. Implementing an online classroom/grading system will allow the instructor to privately share a student’s progress through the use of the internet. Additional features include homework calendars, messaging, discussion boards, wikis, online flashcards and quizzes.*

*Upon completing this module, the learner will:*

* Know the different applications of an online classroom management system
* Know how to set up and manage a class using an online classroom management system

**Quarter 3  
July 13, 2012  
Web 2.0 tools: Wikis, Blogs and Social Networking**

*Description of module: Web 2.0 tools have become popular in and out of the classroom. Using these services to enhance the classroom experience can be a rewarding experience. This module will explain the concept of wikis, blogs and social networking and give instructors creative ways on how to introduce these new trends into their curriculum.*

*Upon completing this module, the learner will:*

* Learn the purpose and uses of Web 2.0 tools
* Know how to set up and format a blog
* Know how to set up and manage a wiki
* Know how to set up a profile and use social networking in and out of the classroom

**Quarter 4  
November 2, 2012  
Creating and uploading videos**

*Description of module: Videos can serve as reliable aids in the instruction of hands-on techniques taught in the classroom. Many instructors would love to create their own videos, but believe they lack the necessary tools to create them. This module will show the faculty how easy it is to film and produce a simple ten minute tutorial video using free software and a digital camera.*

*Upon completing this module, the learner will:*

* Know how to record a simple video for classroom use
* Know how to use Windows MovieMaker to format a video
* Know how to set up a channel on youtube to upload videos for students to view

**Online Modules**

* Attendance recording: How to log in and record attendance on STARS
* Using the gradebook on the server: The features of the local excel gradebook
* How to map a drive on the network
* How to create a lesson plan using the word template
* More as announced

## Materials Needed

* Windows movie maker
* Jing (screenshot/desktop recording software)
* Microsoft Office Suite

## Prototype assessment

* Training Assessment (index)
* Self-Assessment (index)

## Summative Assessment

The expert judgment phase has four parts. Each part is explained and addressed as follows:

*Congruence analysis* is the verification of data by using more than one assessment instrument to measure performance. These modules will be employing the use of a 360 measurement tool. This means that written assessments will be conducted by three groups: The presenters, the learners and the Administrative Advisor. The learners and the Administrative Advisor will complete the Training Assessment tool (see index). The presenter will fill out a Self-Assessment form (see index). Data will be collected and analyzed for results and feedback. When using a 360 assessment, one can see where the results/feedback overlap. Changes will be made to the program as necessary.

*Content analysis* is the objective evaluation of the content presented within the modules. *Design analysis* is the evaluation of the design principles employed in the modules. The content and design will be evaluated by the Dean of Education and the head of the IT department. Module topics are based upon the needs analysis and the discretion of the administration. Adjustments will be made to the curriculum as needed.

*Feasibility analysis* is the phase in which the strength and weaknesses of the program is assessed and the resources available to make the program succeed are considered. This will uncover the prospects for success. The feasibility analysis phase ties back to the original research and design of the program. The materials required to employ the program is minimal. The only factor that will change is the amount of time devoted to the initial creation of the modules.

## Field Trial

Planning/Preparation phase will take place monthly in the weekly staff meetings. Module summaries will be introduced and the online modules will be featured. Assessments after each meeting will be completed and analyzed. Results will be calculated and appropriate changes will be made. The results will be compiled and reported via email to all of the faculty.

The program success depends upon the reception of the instructors. If the instructors are found to be suing more technology in the classrooms following each training, than the modules will be considered a success.

Feedback will also be collected after each module. A training assessment tool (found in the index) will be distributed, filled out and then collected. Results will be compiled and analyzed.

# Index

## Needs Assessment Questions

1. What technology do you use in the classroom, if any?
2. Do you have any training in technology? What classes have you taken involving technology (including classes regarding use of specific software, ie Microsoft Word)
3. How do you feel towards technology?
4. What motivation do you have to use technology in the classroom?
5. Do you prefer to receive training on technology in a group setting, one-on-one training or through online modules?
6. Do you feel that technology is important to you in your classroom? Do you feel that the school encourages the use of technology?
7. Do you feel comfortable learning new technologies on your own?

## Training Assessment

**RATING SCALE: 1 = LOW 3 = MEDIUM 5 = HIGH**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Trainer Name** | **Clarity** | | | | | **Quality of Information** | | | | | **Time Management** | | | | | **Presentation** | | | | |
|  | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Comments: | | | | | | | | | | | | | | | | | | | | |

Please review the following list of knowledge and skills statements. Give some thought to what you knew before this training and what you learned here today. Circle the number that best represents your knowledge and skills **before** then **after** this training.

**RATING SCALE: 1 = LOW 3 = MEDIUM 5 = HIGH**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Before Training** | | | | | **Self-assessment of Knowledge and Skills Related to:** | **After Training** | | | | |
| 1 | 2 | 3 | 4 | 5 | Knowledge of presented technology | 1 | 2 | 3 | 4 | 5 |
| 1 | 2 | 3 | 4 | 5 | Proficiency in presented technology | 1 | 2 | 3 | 4 | 5 |
| 1 | 2 | 3 | 4 | 5 | Techniques and strategies to integrate presented technology effectively into your curriculum | 1 | 2 | 3 | 4 | 5 |
| 1 | 2 | 3 | 4 | 5 | Increase awareness of the variety of technological solutions available to staff and faculty | 1 | 2 | 3 | 4 | 5 |

**Please take a moment to answer the following questions. Your comments are an important contribution as we design learning experiences to meet your professional needs.**

*What will you do differently in your classroom as a result of this training?*

*What do you feel were the strengths of this training?*

*What do you feel were the weaknesses of this training?*

*How can we improve this training?*

*What additional technological-development education do you require?*

## Self-Assessment

*What do you feel were the strengths of this training? What do you feel were the weaknesses of this training?*

*How can the training be improved?*

*What did the learners respond well to?*

*What topics seemed redundant or unneeded?*

*Additional comments or suggestions:*

# Research

Rhodes, C., & Goveia, W. (2002). Faculty training initiative at the indiana university school of education: a participative effort. *Proceedings of the 30th Annual ACM SIGUCCS Conference on User Services, New York,* 114-121. doi: 10.1145/588646.588671

Putman, L., & Wills, B. (2002). A new direction: improved methods for marketing faculty and staff technology training. *Proceedings of the 30th Annual ACM SIGUCCS Conference on User Services, New York*, 103-105. doi: 10.1145/588646.588668