Ashley Chupp

July 2011

Dr. Julie Moore

Fall 2010

What Does Instructional Technology in Education Mean?



CAPSTONE PROPOSAL Master's Degree in Instructional Technology

| Candidate Name: | Ashley Chupp | |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Email Address: | ashleychupp@gmail.com | |
| Advisor Name: | Dr. Moore | |
| Date: | 07/20/11 | |
| Capstone Title: | What does Instructional Technology in Education Mean? | |
| Is this a Capstone Project or Study? | This is a project to develop technology integration among the faculty at Cartersville Middle School. | |
| Client Name & Description | Cartersville Middle School/Title I School in which I am employed. The goal is to aid teachers in learning about and applying the use of technology into their own classrooms. The technology will include Notebook software for SmartBoard use, online applications and Homework Hotline. After school trainings, one-on-one assistance and content-specific assistance will be offered to teachers in order to increase instructional technology use. | |

1. CAPSTONE PROBLEM OR NEED

Teachers at Cartersville Middle School need time and training on utilizing available technology. Cartersville Middle School does not have regular trainings on using new or available technology in the classroom. Many teachers are not aware of the technologies available to them. First of all, our teachers are required to post on Homework Hotline. Homework Hotline is a webpage that each teacher has. This webpage is connected and available through our email. Teachers have never had a training on using this tool. Teachers that use the tool are those that take the time to work through the frustration of learning about the tool. Many teachers give up and do not use the site. Another tool many teachers do not know about is the Notebook software available to teachers with a SmartBoard. Many of the Science teachers still use PowerPoint to present lessons. These teachers are missing out on the many student interactive uses of the Notebook software as they have never had training. Teachers at Cartersville Middle School are not aware of all of the online tools available for student use within the classroom. There are a plethora of sites that can contribute to student learning and communication inside as well as outside the classroom. Many teachers either do not know what to search for or have no idea these tools are available

Another issue is the availability of one-on-one support or content-specific support. Teachers, at some point, will need assistance with using the technology within the classroom. Many teachers need help brainstorming ideas or getting the technology to work in their classroom. If teachers had this one-on-one support or content specific support, they may be more inclined to implement instructional technology. With this capstone, I will design and offer after school trainings for interested teachers in using Notebook software, online applications and developing and utilizing Homework Hotline. There will be a training offered every other month. I will also offer teachers the chance to have one-on-one assistance or content-specific assistance in using technology. As trainings progress, surveys and questionnaires will be given to guide and improve the development of new trainings in the months to come.

2. CAPSTONE DESCRIPTION

The tasks included in the design and delivery of these trainings include:

- Interviews with teachers to discuss technology needs within the classroom and gauge support of optional after school trainings.
- Meeting with content coaches and administration to approve trainings every other month.
- Developing trainings based on needs of teachers. This will also include creating handouts to be distributed during trainings.
- Developing surveys and questionnaires to guide and improve the development of trainings. Analyze results of surveys and questionnaires.
- Offering one-on-one and content specific help when needed. One day a week after school will be offered to teachers for assistance.

The deliverables will include handouts given during trainings as well as surveys and questionnaires to guide and improve the development of trainings.

| Time Frame | Description | Hours |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| July-August | Interviews with teachers to discuss technology needs within the classroom. Offer idea of optional after school trainings to gauge interest. | 2 hours to interview teachers throughout the school. |
| | Meet with content coaches and administration to discuss technology needs within the school and approve trainings every other month. | 30 minutes to meet with content coaches and administration. |
| | Create a sign-up sheet to post in the mailroom for teachers to sign up for Homework Hotline training. Post an email to CMS Announcements informing teachers of upcoming training and sign-up sheet. Create a model Homework Hotline webpage for teachers to view. Develop training on using Homework Hotline to be offered at the end of the month. Create and copy handouts with written instructions and pictures to guide. | 10 hours |
| | Homework Hotline training after school. | 2.5 hours |
| | Offer and aid teachers in one-on-one and/or | 4 hours |
| | content specific technology use. | (18 hours total) |
| September | Create and send a questionnaire to teachers that attended training session to gauge relevance and guide improvements for future training. Analyze results and make note of changes needed. | 3 hours |

| | Offer and aid teachers in one-on-one and/or content specific technology use. | 6 hours |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | | (9 hours total) |
| October | Inform teachers through CMS Announcements of Twitter in the Classroom training available at the end of the month and post sign-up sheet in faculty mailroom. Create Twitter handouts with directions on setting up an account and its uses within the classroom. Copies of handouts for teachers. | 3 hours |
| | Twitter training after school. | 1 hour |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 6 hours |
| | | (10 hours total) |
| November | Interview teachers that attended the Twitter training to see what improvements need to be made and if/how they are using Twitter in the classroom. | 2 hours |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 6 hours |
| | | (8 hours total) |
| December | Inform teachers through CMS Announcements of Google Docs/Gmail Training for use in the Classroom available in the middle of the month and post sign-up sheet in faculty mailroom. | |
| | Prepare for training by creating a tutorial for teachers to go through to explore the available uses | 3-5 hours |

| | Google Docs/Gmail Training for use in the Classroom | 1-2 hours |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 3 hours |
| | Meet with content coaches and administration to discuss trainings and progression. | 1 hour |
| | | (11 hours total) |
| January | Inform teachers through CMS Announcements of Basic Notebook software training available at the end of the month and post sign-up sheet in faculty mailroom. | |
| | Create an easy to read handout for teachers to use during training. Make copies of handout. | 2 hours |
| | Create a model Notebook file highlighting basic uses and features. | 2-4 hours |
| | Basic Notebook software training after school. | 1-2 hours |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 6 hours |
| | | (14 hours total) |
| February | Send a questionnaire to teachers that attended Basic Notebook software training session to gauge relevance and guide improvements for future training. Analyze results and make note of changes needed. | 2 hours |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 6 hours |
| | | (8 hours total) |
| March | Inform teachers through CMS | |

| | Announcements of Interactive Notebook software training available at the end of the month and post sign-up sheet in faculty mailroom. This training is a follow up to the Basic Notebook software training. | |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| | Create model Math and Science notebook files to highlight uses, features, ideas, etc | 6+ |
| | Follow up training on Notebook software | 1.5-2 hours |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 6 hours |
| | | (14+ hours total) |
| April | Send a questionnaire to teachers that attended Interactive Notebook software training session to gauge relevance and guide improvements for future training. Analyze results and make note of changes needed. | 2 hours |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 3 hours |
| | | (4 hours total) |
| May | Create and send an end of year survey on trainings to improve and develop future trainings related to technology integration. | 3 hours |
| | Offer and aid teachers in one-on-one and/or content specific technology use. | 4 hours |
| | | (7 hours total) |
| | Total | 103+ hours total |

3. STANDARDS

- TF-I. Technology Operations and Concepts (A,B)
- TF-II. Planning and Designing Learning Environments and Experiences (A F)
- TF-III. Teaching, Learning, and the Curriculum (A-E)
- TF-IV. Assessment and Evaluation (A-C)
- TF-V. Productivity and Professional Practice (A, B)
- TF-VI. Social, Ethical, Legal, and Human Issues (A-E)
- TF-VIII. Leadership and Vision (A)

4. RELATED RESEARCH OR LITERATURE

Taking Technology to the Classroom seeks to answer the questions, "What type of training is necessary?" and "How much training is sufficient?" These are difficult questions to ask in education today. Technology is changing quickly. Schools may train teachers on the piece of technology, but they are not trained on how to utilize this piece of technology in the classroom. Good teaching and not good technology should be emphasized. Training should be focused on application, done in groups and brought to the teacher. According to William Knoke, technology that is not used and implemented quickly is worthless: "Cutting-edge technology is as perishable as a truckload of ripe bananas: it's worth a fortune today, but if not used quickly, it becomes worthless" (Diaz, David). Because of this, I want to give teachers the support they need to use the available technology in their classroom. I can do this by providing relevant training and supporting teachers by being available to assist in their own classrooms.

In training teachers on using the available technology in their classrooms, teachers have the ability to engage students in a way they could not before. Technology is more than a tool; it supports deep and engaged learning, simultaneous articulation, creation, and reflection in participatory social networks and dynamic ecosystems(Teaching in a Participatory World). Teachers who have spent an entire career mastering the skills required to manage a 20th century classroom need support to design 21st century social learning approaches in participatory Web 2.0 environments(Teaching in a Participatory World). I want to give teachers the ability to move forward in 21st century learning and discover new ideas for their classrooms. Teachers at my school know their content and the pedagogy associated with that content. I want to bring in the technology piece so teachers can blend content, pedagogy and technology in order to adhere to the TPACK approach (Schaffhauser, Dian).

Resources

Diaz, David. "Taking Technology to the Classroom: Pedagogy-Based Training for Educators." The Technology Source Archives at the University of North Carolina. November/December 2001. July 2011 Online

<http://technologysource.org/article/taking technology to the classroom/>.

Schaffhauser, Dian. "Which Came First – The Technology or the Pedagogy?" The Journal: Transforming Education Through Technology, September 2009. July 2011 Online http://www.cea-ace.ca/education-canada/article/teaching-participatory-digital-world>.

"Teaching in a Participatory World." Canada Education. July 2011 Online

<http://www.cea-ace.ca/education-canada/article/teaching-participatory-digital-world>.

5. EVALUATION PLAN

To evaluate the success of supporting continuous training, data will be collected from teachers through interviews, questionnaires and surveys throughout the year. Work samples will be collected to show the results of technology integration. Administrators should see a difference in technology use by the end of the year when doing walk-throughs and observations. Teachers will have a chance to share their ideas and success with other faculty members during faculty meetings.