

Analysis Paper

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Needs Analysis

In today's classrooms teachers are being asked more often to integrate technology into their curriculum for teaching, activities, and projects. While some instructors are eager to bring technology into their classrooms others are still hesitant. The reason for this hesitancy may be a lack of knowledge and a lack of experience with these new tools. Instructors may not be motivated to integrate technology into their classroom because they feel that their current methods are sufficient and don't see the need for change.

Bluffton Elementary and Early Childhood Center is located in Bluffton, South Carolina. The school currently serves 610 students in grades Pre-kindergarten through fifth grades. One of the school's current missions is to actively integrate educational technology into the classroom.

The majority of technology requests and needs seen within this school are for additional resources to present information. A training module will be developed to introduce teachers to new tools and assist them in obtaining the skills needed to develop presentations and lessons to support the learning experiences of their students. Since the teachers are also required to take a technology proficiency test each year this module will cover several needs. It will assist teacher in gaining the proficiency level that is required as part of their professional development plan as well as giving them the opportunity to build their confidence with the tools that are available to them.

Learner Analysis

The school has a total of 75 employees with approximately 42 being certified teachers. The technology skill level of 80% of the certified teachers is very high. The remaining 20% are beginner to moderate levels. The teachers have not integrated Web 2.0 tools into the classroom on a consistent basis. One of the school's goals for technology is to bring the percentages up on all levels and push for a higher integration of Web 2.0 tools into the classrooms. This learner analysis was completed by Christine through viewing relevant documentation and interviewing the staff at her school.

Christine reviewed the technology proficiency level for all teachers. All teachers are required to take a technology proficiency test each year. This test has been put in place by the state department. The proviso is as follows:

1A.32. (SDE-EIA: XI-E.2.-Teacher Technology Proficiency) To ensure the effective and efficient use of the funding provided by the General Assembly in Part IA, Section 1 XI.E.2 for school technology in the classroom and internet access, the State Department of Education shall approve district technology plans that specifically address and incorporate teacher technology competency standards and local school districts must require teachers to demonstrate proficiency in these standards as part of each teacher's Professional

Development plan. The Department of Education's professional development tracking, prescriptive and electronic portfolio system for teachers is the preferred method for demonstrating technology proficiency as this system is aligned to the International Society for Technology in Education (ISTE) teacher standards. Evidence that districts are meeting the requirement is a prerequisite to expenditure of a district's technology funds.

Bluffton Elementary has 47 certified teachers that took the test. Ten teachers were not able to make the 80% passing score. Fifteen were able to score well above 90%. With these results, we will focus the tutorial on the 10 that did not pass.

Over the past two years the teachers at Bluffton Elementary have been given the opportunity to move to new elementary schools that have been built in the area. During this same time the principal has directed the school as a whole toward more advanced technology. Teachers that were not interested in this focus went to other schools. The remaining 47 teachers are highly motivated and love to explore new technology.

Of the 47 teachers, 2 were male and 45 were female. The average age of all teachers is 35 years of age. Forty-six percent of the teachers hold a Master's degree or higher. With the new technology focus for the school, most teachers have worked hard to advance their technology skills. Their training has included SMARTboards, digital cameras, MovieMaker, website development, and basic Microsoft products. They just beginning, however, to recognize the possibilities for Web 2.0 tools and classroom integration. As shown above, most are capable of implementing technology but need to see the added benefits for the classroom. The teachers love the idea of being able to train on their own time and at their own rate. Because of this, asynchronous, self-paced, delivery methods such as web-based video tutorials are preferred. This types of training will give the teachers the advantage of learning at their own pace and being able to review it as many times as they may need.

Since this training module will begin with teachers that did not achieve a passing score on the technology proficiency test, we can assume that the learners have limited experience and comfort with Web 2.0 tools. In fact, they will likely have a certain degree of skepticism and caution regarding the content itself (Web 2.0 tools) and the delivery method (web-based delivery). They have the motivation to utilize technology tools but need a little extra push and explanation of benefits.

After careful thought and consideration of the needs of the school and learners, the team Tek Effect has decided to create tutorials on the use of the web 2.0 tool Museum Box (<http://museumbox.e2bn.org/>). The background knowledge given about learners will help the team decide how to specifically design and develop the tutorials.

Task Analysis

Entry Skills needed

- Familiarity with Internet
- Familiarity with computers

Tools needed:

- Computer (laptop, desktop)

- Web Browser (Explorer, Firefox)
- Internet connection
- Storage for projects (external drive, network storage) that are not web-based
- Media items (images, sounds, weblinks, videos, etc...) to use with web 2.0 tool

Task Analysis (for general Web 2.0 tool):

- Navigate to the Web 2.0 tool
- Create an account for the service
- Create a new project on the Web 2.0 tool
- Upload/enter content using Web 2.0 tool
- Organize content
- Share created content

Learning Objectives:

Teachers will master several new skills while using the tutorials of Museum Box.

Teachers will be able to...

- Create a Museum Box account.
- Create student accounts for Museum Box.
- Add media (images, text, sounds, videos, files, and links) items to 'drawer'.
- Add media to the museum box from the drawer.
- Add title and description to the museum box.
- Open cube within a museum box.
- Add a title and caption to each cube.
- Add media to at least three sides of a cube.
- Change the amount of cubes within a layer.
- Change the number of layers in a museum box.
- Change color or texture of the museum box.
- Change color or texture of the cubes.
- Save a museum box.
- Implement the use of this web 2.0 tool in classroom instruction or student demonstrations.

Goals:

- Gain the learners attention and encourage them to participate in the activity and interact with the tools
- Make the learner feel that the material is relevant to their needs and will be useful to them in the future.
- Help build their confidence by guiding them step-by-step throughout the process. Lessons will be presented in small steps and be self-paced.
- Provide positive outcomes for the teachers with these Web 2.0 tools so that teachers will be excited to use them and see how useful these tools can be in their classroom.