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AUTHOR Roby, Teshia Young
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ABSTRACT

This paper describes a 6-month bi-weekly Saturday program that was sponsored by the 100 Black Men of Atlanta (BMA) under their Project Success initiative. Project Success is a program that allows inner-city middle and high school students to be mentored by members of 100 BMA and volunteering college students. The program community consisted of one instructional designer and one instructor (the author was both), approximately five undergraduate student volunteers and two groups of sixteen to twenty students. The program theme was the recording industry, to suit the interests of a majority of students who wanted to pursue a career in the music industry. The students were cast as recording company executives who need to accomplish a particular task for the business. The six program modules are described, which focused on: a program introduction; the Internet; Microsoft Word; current uses of technology; Microsoft Excel; and Microsoft PowerPoint. The program concluded with an opportunity for the students to demonstrate their ability to use the technology through a well-attended voluntary presentation at an assembly for parents and program sponsored. The lessons that were learned from participation in this technology program are discussed. (AEF)

A Themed and Collaborative Approach to Teaching Computers and the Internet

Teshia Young Roby
Georgia Institute of Technology

This research series is a practical and effective approach to exposing middle - and high- school students to fun and useful elements of the Internet, current technology issues and to Microsoft Word, Excel and PowerPoint. The theme for the learning series is one in which the students are owners of music recording companies. Youths are fascinated by careers in the recording industry! The focus of this theme is not on the musical talents, but on the professionals who run these organizations.

The Program Community

The 6-month bi-weekly Saturday program was sponsored by the 100 Black Men of Atlanta under their Project Success initiative. Project Success is a program that allows inner-city middle- and high-school students to be mentored by members of 100 MBA and volunteering college students. The Project Success students and their parents have to be actively committed to the entire program, which includes participation in workshops, training, and cultural events that are designed to teach the students to be productive, progressive, members of society. For each student that stays committed throughout his or her middle- and high-school career, the 100 BMA pledges to pay the full tuition for any college to which the student is accepted. The program is a long-term commitment for everyone involved, including the students' guardians. The 100 BMA are currently into their second round of students to reach college age.

The program community consisted of one instructional designer (me), One instructor (me), approximately 5 undergraduate student volunteers and two groups of 16 – 20 students. The volunteers, each whom had technical experience, floated around the classroom offering help to students who needed it and helped to keep the noise down when the students got a little excited.

The students were broken into two groups. For the first two hours of the half-day program, half of the entire group would work with me and the other half would participate in another part of the program. At the end of the two hours, the two groups would switch activities. The groups were assigned arbitrarily.

The Program Theme

During my volunteer time with Southeastern Consortium of Mathematicians and Engineers (SECME), I found that many – if not most – of the students that we visited wanted to pursue a career in acting, modeling or the music industry and the heaviest concentration was in the latter. I decided from the start to use a theme throughout the program, to put the students in the center of the learning, and to bring about reinforcement. I decided the theme would be that of the recording industry to provide interest and familiarity for the students. Though the theme encompassed the idea of the recording company, the focus of the theme was not on the musical talents, but on the professionals who run the companies. I wanted the students to be in positions of authority.

In each scenario within the learning series, the students were cast as recording company executives who needed to accomplish a particular task for the business. A list of objectives or tools needed to accomplish the task was also included. The instructions that followed the scenario and objectives, which required the use of one of the applications addressed in the program, helped them to accomplish those tasks. I included actual screen captures in the notes, which allowed the students to know exactly what they should see on their screens and it enabled them to work ahead if they liked.

Curriculum format

The objective of the Saturday technology sessions was to expose the students to fun and useful elements of the Internet, current technology issues, and Microsoft Word, Excel, and PowerPoint.

Module 1 – Program Introduction

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The first module began with student, volunteer and instructor introductions. To bring cohesiveness, consistency and relevance to the program activities for the students, a general theme for the activities was introduced. Two members of local recording companies were invited and were present to give the students an idea of the importance of computer and technical knowledge in the industry. They also answered a barrage of questions about various facets of the recording industry.

During the module, the students also took a pre-test on the various components of the computer. They were then shown actual internal components of a computer and told of their functions. Finally, they were given a verbal overview of what the entire program would entail.

Module 2 – The Internet

Unit one of the second module included a PowerPoint presentation on the history and current state of the Internet that included definitions, information search techniques and emailing instructions. The students were then lead to the computer rooms where they all were assisted in setting up their own email accounts. They also participated in a World Wide Web scavenger hunt. The scavenger hunt consisted of questions that varied in difficulty. The students were asked to use any of the various search techniques that were introduced in the presentation to find the answers. Once a student found an answer, the student was asked to show the class how that answer was found and received a treat.

Unit two involved more in-depth Internet searching by the students. The students were asked to find three types of websites: recreational, reference and consumer. They were instructed to find three websites for each category (for a total of nine websites) and to give a description of each. The students were then asked to volunteer to share the websites they found. The reports were collected so that a list could be compiled and distributed at a later date. The students were also given a post-test on the components of the computer.

Module 3 – Microsoft Word

The first unit of the third module focused on an introduction to Microsoft Word. The students took a pre-assessment regarding their knowledge of MS Word and received instruction on creating a flyer for their recording company's annual talent show.

The second unit included instruction on creating a research paper in MS Word. The activity was introduced as a report for the recording company CEO about the Internet and web publishing. In the scenario, the report occurred as a result of a suggestion by an executive (the student) about creating a website for the company. Afterward, the students took a post-assessment on their knowledge level with MS Word.

Module 4 – Current Events in Technology

The fourth module consisted of a discussion on the importance of technology. The students were arranged in groups and asked to brainstorm about benefits of having access to a computer and the Internet. The students were also introduced to the highlights of a report called *Falling Through the Net: Defining the Digital Divide* (www.ntia.doc.gov/ntiahome/fttn99). The report, based on the December 1998 U.S. Department of Commerce Census Bureau data, provides an updated snapshot of American use of technology. The report identified that computer ownership and Internet access has increased for all ethnic groups in all locations. Unfortunately, though, groups that were already connected are now far more connected, while those with lower rates of access have increased less quickly. As a result, the gap between the technologically wealthy and the technologically poor is growing. This gap is known as the "digital divide". The report also revealed that there are many factors that create the huge difference between those who have computers and Internet access and those who do not. The children discussed in groups and with the class several ways to provide solutions to the problems.

Module 5 – Microsoft Excel

The fifth module included a pre-assessment and an activity to introduce the students to Microsoft Excel. The activity was presented as scenario regarding record sales for the various recording label artists and the overall recording company. The students created a spreadsheet and accompanying charts and shared their end results with the class. A post-assessment followed the activity.

Module 6 – Microsoft PowerPoint

Unit one of the sixth module began with a pre-assessment on PowerPoint. The students participated in an activity that allowed them to create a promotional PowerPoint presentation for their company's new artist event. In the scenario, the company executive would design the presentation to attract interest and place it on a computer in the student center of a local university.

Unit two provided the students with an opportunity to develop a presentation of their own. The students were asked create an original presentation that included autobiographical information and a 3-, 5-, and 10-year plan for the future. The presentation was also to include family pictures that were scanned into the computer, digital pictures taken in class and graphics imported from the Internet. The students received instruction on visual consistency and quality presentation design.

The third unit of the sixth module began with presentation tips such as eye contact and annunciation. The students were given the opportunity to practice, present to the class and receive feedback. The unit ended with a post-assessment on PowerPoint.

The fourth and final unit consisted of presentations by the students. The students were encouraged to invite their parents to observe the presentations. Sponsors and mentors of the program were also encouraged to attend.

Program Conclusion and Assessment

The program concluded with an opportunity for the students to demonstrate their ability to use the technology through a well-attended voluntary presentation at an assembly for parents and program sponsors. Evidence of the effectiveness of the instruction was provided through a statistical comparison of the pre- and post-tests, as well as comments of interest, excitement and approval from several of the program students, their parents, and Project Success volunteers and employees.

Jonassen's Seven Aspects of a Technology Integration Learning Environment

According to Jonassen (1999), technology integration does not happen in a particular location, but in a particular learning environment. That environment includes a learner-centered-teacher-as-facilitator atmosphere and seven additional aspects that make the learning meaningful. The learning environment is active and requires students participate in the processing of information; it is constructive, so students are encouraged to integrate new ideas into their prior knowledge; it is collaborative, which allows students to work in learning communities; it is conversational, so that students share ideas and build upon each other's knowledge; it is contextualized or situated in real world task or problem-based activities; it is intentional, and students are made aware of cognitive goals and objectives at the onset; and it is reflective, where students are encouraged to reflect on the process and articulate what they have learned.

The overall theme of the technology learning series was that of a recording company in which the students were corporate executives acting on behalf of the company. Each of the seven aspects was present within the instruction produced for the program. For instance, with their prior knowledge of and interest in recording companies, students were able to put the new information regarding the software applications into context; students were assigned ownership of their recording companies and were given positions of action and authority within the business. They were also allowed to choose an "executive board" of three to four members. This allowed them to learn in teams. The team atmosphere allowed the students to share ideas and construct the knowledge-building communities. The modules began with a scenario that put the instruction into a real-world perspective for the students and each scenario was followed by a list of objectives for the instruction, so students were made aware of the concepts that were to be learned. Many of the modules also ended with an opportunity for the students to share their projects with the other teams, talk about their process, and answer questions asked by the instructor and other students.

Lessons learned

There were several valuable lessons that I learned while participating in this technology program, most of which had nothing to do with the technology itself. Most had to do with the relationships and dynamics of the classroom.

Use a title with your name in the beginning

First, I would have asked them to call me Ms. Teshia. I did not do that at first because most of the adult volunteers were addressed by their first names and I wanted to “fit it” but what I failed to realize was that those kids had long-term intimate relationships with those people that made it appropriate. I had not established myself in the community and had not earned the respect of the students, so I was placing myself on the peer level with them instead of earning my position. If I had it to do again, I would have asked them to call me Ms. Teshia and considered allowing them to do otherwise once we grew our relationships. It is very hard to go the other way.

Include plenty of conversation and break time for students

Break time was the time when I got to know the kids of personal levels, when they got to know me, and when they got to fellowship with each other. I suggest taking plenty of breaks. You can get them to stay on task if they know a break is coming soon. Also, since the program is not compulsory, it should not feel like hard work and school, but fun like computer camp. This was also a time when I got a chance to truly learn about the likes and dislikes of the kids’ generation, which informed my design of the activities.

Allow the use of home language at times

Home language should be permitted in the classroom in certain situations. I allowed them to talk amongst themselves in a way that is comfortable to them but not offensive to anyone. They even communicated with me in a respectable manner in a form of their home language. However, when it came time to present, they were asked to use Standard English. Presentations were voluntary, and they knew by volunteering, they would have to present using Standard English. Most were more than compliant.

Place no labels or stereotypes on the students

Even though you have to try to find out all you can about the students before the course in order to design the instruction, do not associated the students with labels as a result of that inquiry. It can prove to be harmful the their self-images and counter-productive to the instruction.

Use small groups

The kids flourished in small groups! Students brainstormed and named their recording companies, and many of the groups even designed a logo and assigned rolls within the recording comp any.

Make certain the theme has relevance for the learners

It was so important to have lessons that had relevance to the students because they embraced the learning. They saw immediately how they could use that new knowledge and they wanted to learn.

Include group policy making at the start of the program

It became necessary towards the middle of the program to establish some rules of behavior. The program was voluntary, so there were kids who came every session and those who came every once in a while. There were also those who behaved very well and those with whom we had challenges. We has instance where our group disrupted others in the building and times when a few members the program disrupted other members. So we had to come up with rules that the kids understood and embraced. We decided to include the students in developing a list of acceptable and unacceptable behavior and the consequences of both and had them sign it. It curtailed many behavioral problems. In retrospect, I would have done that much earlier in the program and I would have kept a student signed copy and sent home a copy that had the student’s signature for the parent to sign and return, just to cover all bases.

Conclusion

The themed and collaborative approach to teaching computers and the Internet worked well because the program was a community effort and there was a consistent theme throughout the program that engaged the students and gave meaning and practicality to the content. Each of the modules included screen captures and collaborative activities, which allowed the students to work at their own pace and communicate understanding of the content with group members. Jonassen's seven aspects of a technology integrated learning environment certainly informed the design and implementation of the themed series, but group policy making, frequent breaks, and an absence of stereo types of the students were instrumental to the success of the learners.

Contact Information

Teshia Young Roby, Instructor and PhD Student, Georgia State University, University Plaza, College of Education, Department of Instructional Technology, Atlanta, GA 30303, MSITI, 404-651-0181, Teshia@robyweb.com.

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