

## CYCLE THREE

### *Action Plan*

The thematic plan for Cycle 3 is centered on a unit (Appendix C) titled “Choose your own TechVenture”. Wanting to make sure I have a comprehensive curriculum I reviewed the National Educational Technology Standards for Students and chose to focus on:

- NETS\*S #1: Students are proficient in the use of technology.
- NETS\*S #2: Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- NETS\*S #3: Students use technology tools to enhance learning, increase productivity, and promote creativity.
- NETS\*S #4: Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
- NETS\*S #5: Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

I wanted to give students opportunities for “choice” in this unit. I wanted students to understand that an effective design can enhance a message being presented. My essential question for this unit centered around: How can you convey essential information in a way that is engaging and authentic?

The technology skill focus during cycle three was that that Microsoft Word has many desktop publishing features (column, Word Art, auto shapes, borders, text boxes, section breaks) and that PowerPoint can be used to convey information through interactive and multimedia components. I also wanted students to find out what resources are available to learn and discover new technology skills.

I decided on three performance tasks that I would use to evaluate student learning:

1. Newspaper: As a class decided on an authentic audience for newspaper project. In groups, write articles and design layout for one page.
2. Interactive PowerPoint: Create a survey to discover what classmates already know about topic. Write text and design and interactive PowerPoint to educate about chosen topic.
3. Choose your own Techventure: Choose one new software tool to learn and discover in groups.

During this last cycle I wanted to make sure all of the technology skills had been covered during the semester (see Appendix D). I determine that a good way to implement these skills was to give the students some choice in how they demonstrate their understanding of certain skills.

The first assignment allowed the class to choose the audience for the newspaper project. They decided to make a newspaper to give to new incoming students. We reviewed some desktop publishing skills and I introduced new techniques using column and section breaks for managing text in a newspaper. The students worked in groups to decide topics, write articles and design the layout for each page. The school admission counselor reviewed the pages and the newspaper was sent to the printers and will be mailed with class schedules to new incoming students this summer.

A quiz was given to check for understanding of desktop publishing skills in Word. There were two sections to the quiz: one section focused on vocabulary terms and procedures; the other section asked students to demonstrate on the computer how to complete specific Word skills.

The next project gave students opportunities to choose a topic of their choice and create an interactive PowerPoint project. Students first surveyed classmates about what they already knew about their chosen topic and then began research. Students wrote the text for their PowerPoint in a Word outline so the focus stayed on the information being presented. When done, students created original design template for their slide show that matched their topics. The outline was opened in PowerPoint and hyperlinks or actions buttons were added to create interactivity. Students add web links or multimedia components to enhance the interest and interactivity of the presentation. Students self-evaluated their presentations before sharing them with classmates.

The final activity of this Unit will be carried out during the last two weeks of school.

### ***Data Gathered***

Each week I blogged my observations about what happened in my classroom during the TechVenture Unit. This blog is located at <http://ccassinelli.blogspot.com/>.

After the groups finished their newspaper pages I asked them to evaluate the process and group participation. The class chose the audience for the newspaper project. 72% reported that the class chose the topic they wanted, 22% had no opinion and 6% didn't want that topic.

I asked the student to explain the resources they used in writing their articles. Students reported in their journal entries that they used their own knowledge, interviewed teachers and administrators in our school, referred to the school handbook and webpage and interviewed other students.

14 out of the 18 students reported equally sharing the job of organizing the articles and layout of the newspaper. 2 students felt they did more of the layout than their group members and 2 reported not be as involved. The students had these comments:

- My group all found pictures and added their articles to the lay out and we all collaborated and fixed the margins and spaces
- I think we all worked fine together and contributed to the project.
- Our group shared all the works and divided works before hands so it worked out really well.
- Some didn't stay on task while others really did stay on task.

Groups reported using a variety of desktop publishing skills on their newspaper pages. The skills used the most were columns, section breaks, images, justified alignment, indents and textboxes. I observed quite a few students showing other students how to format the newspaper for an effective layout.

Student's comments on the evaluation of how to improve the assignment centered on having more time to write the articles, having more resources, smaller groups, and more sections in the newspaper. At the same time almost half of the students reported that the project was fine the way it was or they didn't have any suggestions. A comment from my blog stated that I felt like the whole project was very successful and I think the students showed a lot of enthusiasm for the assignment because I gave them choice in demonstrating their technical skills.

The students took a quiz to check for understanding of desktop publishing skills. The class average for the written vocabulary and procedures section was 80%. The class average for the computer based application section was 90% with a total quiz average of 85%.

I documented students behaviors during direct instruction time, during group project work and then during individual tasks. Some of the observations from my blog include:

- Group work
  - Initially there is a lot of discussion
  - Some students made the decisions, other members wait for instructions
  - Students conferred with each other about progress during writing of article
  - When students were formatting their newspaper page, students who were not actually controlling the computer were not as involved.
  - Groups that only had 1 or 2 members formatting per page were more on task than higher numbers
- Direct Instruction
  - Teacher can view 3/4 of screens from her vantage point and see if all are following along with instruction
  - Students are engaged when instruction is unfamiliar - opening word outline in PPT
  - If students perceive they already know the material - they seem to "check out"
  - Where students sit in room seems to have direct impact of how well they pay attention. Students in the front right row and back row do not watch demonstrations on overhead screen.

- Off task behaviors include trying to use headphones to listen to music or websites, viewing own screen instead of demo, not looking at teacher, talking to neighbor
- Individual tasks
  - Some students work well on their own
  - Some students need interaction or clarification to understand the task
  - If students have clear understanding of task, or written directions to refer to, they usually are more productive than those who have to stop and ask for clarifications
  - The more confident the student is in their ability to complete the task at hand, the more on task behavior I observed

During direct instruction for specific PowerPoint skills, the students were introduced to new techniques they had never used before. The first technique was writing PowerPoint content in a Word outline and then opening the outline in PowerPoint. The second technique involved creating an original slide master for a design template. Student comments included:

- You can focus on the writing and not get distracted by playing with animations.
- You must set up the outline correctly otherwise this process doesn't work.
- It was cool to see all the text on the correct slides.
- I love learning new shortcuts!
- It makes the show more professional looking - but I still like change some of the background designs for some slides.
- I probably won't go search for design templates online anymore - I'll just make my own.
- I used to spend a lot of time animating all of the text. Completing the animations in the slide master saves TONS of time.
- I never knew that you could add action buttons or hyperlinks in PowerPoint to make the projects more interactive.

The teacher and the students designed a simple questionnaire for students to use to determine if they met all of the objectives for the PowerPoint assignment. Student then self-assessed their project according to following questions (if they answered No, they were encouraged to correct the situation before turning in).

1. Did I write out all of my content in a Word outline?
2. Did I design an original design template and apply the slide master to all slides for a professional looking presentation?
3. Did I vary my slide layouts and add images to my presentation that add interests or gives more information about my topic?
4. Is my presentation interactive? Did I create a table of contents or add navigation buttons to guide my audience through (and back) my presentation? Do all of these links work correctly?
5. Have I given my audience something else to do beside just read my text and information (example, links to web pages, audio, video)?
6. Optional: Have I added animations or transitions that enhance my presentation – not take away from the project by being distracting or annoying?

7. Have I listed by resources for my presentation and made sure the text is written in my own words?
8. Have I done my best work?

## *Data Analysis*

*Student Engagement and Attitudes:* The data collected suggests that giving students choice and ownership in an assignment result in involved students and more interest in the activity. 78% of the students reported that the classmates equally shared the responsibilities of the creating the newspaper pages. Comments like “I think that [the project} was pretty effective actually... I learned a lot about how to do a layout and make it look more professional” and the student’s excitement about mailing the final newspaper to the new students shows a high level of interest and excitement.

Teacher observations about group interactions identified issues of some students engaged when they were working on shared documents and some students not as involved. Even though the students reported that almost everyone was involved in the layout of the newspaper, I noticed a few time that some students did not have anything to work on which is an issue that I will need to address.

Other observations about student behaviors during direct instruction time show that some students were distracted by what was on their computer screen. Off task behaviors include trying to use headphones to listen to music or websites, viewing own screen instead of the demonstration, and not looking at teacher. A lab management software program to change all screens to the instructor demonstration might solve this problem during demonstrations. I also noted in my blog that if the students perceive they already know the material - they seem to "check out" and not pay attention which might warrant an evaluation of the purpose of the direct instruction.

*Skill and Content Development:* The final computer skills were integrated into individual and group projects for the 3<sup>rd</sup> cycle. The newspaper reinforced desktop publishing skills. The students performed well on the quiz to check for understanding and the final newspaper received a lot of compliments from the school admissions counselor. The PowerPoint assignment provided students with new skills and techniques. Student comments such as “you can focus on the writing and not get distracted by playing with animations” was exactly my purpose in requiring the content to be written in Word first.

*Curriculum:* An analysis of the scope and sequence of computer skills (see Appendix D) shows that overall a variety of Word, Excel and PowerPoint skills were integrated throughout all three instructional units. A few recommendations I noted are: there are too many assignments that focus on Word skills but specific review of using tables is suggested, Excel skills need to be evaluated a third time to check for understanding, the introduction to PowerPoint in cycle 1 should be required not optional, and opportunities to include collaborative Web 2.0 tools should be encouraged.