Final Project

EDTC: 6960 Educational Technology and Professional Development
Final Project

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DESCRIPTION OF AUDIENCE

The Austintown Local School District is a large district consisting of four elementary schools, one intermediate school, one middle school and one high school. Austintown is located in Mahoning County and is a suburb of Youngstown, Ohio. Austintown has approximately 28,800 residents and is facing an economic decline. The school district has been struggling financially for many years as the community has not passed a levy in 13 years.

Fitch High School has a staff of 103 teachers and a body of approximately 1,660 students. The technology resources at Austintown Fitch High School are limited. The school has one common computer lab that is comprised of 31 computers. Teachers must sign up for the lab and only one class at a time can be accommodated. Every general education teacher has at least one computer in their classroom, as well as access to e-mail and the Internet. Seventeen classrooms are equipped with SMART Boards and one math teacher uses TI-Graphing calculators in conjunction with SMART Board technology. Students who take Drafting I and II use CAD software to complete class projects.

Typically, most teachers bring their own equipment (such as digital cameras, scanners, printers, etc.) from home, or, they simply don't utilize any technology at all in their classrooms. Free software programs, such as OpenOffice and Photo Story 3 for Windows are available for use by all staff and students. Because the district can no longer afford licensed programs, this freeware and no-fee programming has been implemented in lieu of the costlier programming.

There are four teachers in the technology department, all of whom have a classroom with computers. The technology classes that are offered to students are Business Information Systems, Computer Applications, Digital Imaging, Foundations of Technology, Web Page Development I and II, and Accounting. Students are not required to take these courses; they are all considered electives.

As designated by the head principal at Fitch High School, Mr. Doug McGlynn, the intended audience for both professional development sessions was the staff in the special education department. The special education department is currently comprised of nineteen staff members, including ten special education teachers, one student teacher, six tutors, one speech and language therapist, and one school psychologist. The school psychologist also serves as a part-time administrator, as he is an assistant to the Director of Special Services for the district. Each special education classroom has one computer for teacher use, three computers for student use, a scanner, and a color printer. Four out of fourteen special education classrooms are equipped with a SMART Board. The special education staff has received very little training in the area of technology, but does get technical assistance from the head of the technology department and the district technology coordinator as needed.

ASSESSMENT OF KNOWLEDGE

To determine topics that would be useful and appropriate for our target audience, informal interviews were conducted with the special education staff between February 17, 2009 and February 27, 2009. The two topics that seemed to be of interest to the staff were digital photography and WebQuests. Once the staff identified their areas of interest, our team developed and distributed surveys specific to those topics.

Nineteen surveys (see evidence #1A and 1B in appendix) were distributed to the special education staff on March 6, 2009. Sixteen completed surveys (see evidence #2 - hard copy only) were returned by March 13, 2009. The findings from the initial informal interviews and the surveys were significant drivers and helped to direct us while we designed our professional development sessions.

Overall, the surveys indicated that most people were interested in learning more about using digital photography and WebQuests with their students. A summary of each question that was asked

for both topics is provided in the appendix (see evidence #3A and 3B). Fifteen out of 16 people indicated that they would consider attending our sessions. Most people indicated that they would be able to stay after school, but some potential attendees needed to leave as early as 3:30 pm. With regard to refreshments, two people indicated that they were diabetic and could not have sugar. One person requested that we provide snacks high in protein.

When planning the sessions, we took several things into consideration. First, we poured over the surveys to determine the specific elements of digital photography and of WebQuests that we would need to focus on in order to meet everyone's needs. For example, most people indicated that they were able to import photos from their camera, a flash drive, or a cd onto a computer. Accordingly we only planned to spend ten minutes of the session on this step.

For the session on WebQuests, most people indicated that they were not familiar with the components of a WebQuest, so we decided to allot 15 minutes for this during the session. As expected, some people had more experience with these topics than others, so we needed to account for this discrepancy in knowledge and skills. It was extremely helpful to us to have the surveys and be able to use them as a guide, especially in the planning stages of this process.

We also considered the time the participants had available in order to attend these sessions. During the informal interviews, several of the potential participants had mentioned that they had to pick up their children after school or that they had other commitments. The surveys indicated that some people would be able to stay late into the evening, some as late as 8:00 pm! After considering all of the comments through the informal interviews and the surveys, we decided that we wanted to make the sessions available to as many people as possible in the special education department. Therefore, we decided to keep both sessions an hour long and planned for them to take place right after school

from 2:30 to 3:30 pm. This way, the participants only had to stay an additional 40 minutes past their contracted time and we would be able to obtain a larger audience.

Another important factor that we considered was the refreshments. We knew that having refreshments would be an important draw for our sessions and we wanted to make sure that we provided snacks and beverages that would help keep the participants going and not put them into a slump at the end of a long workday. We took into consideration the fact that two people are diabetic and planned refreshments that would be appropriate for these people. For our first session on digital photography, we planned to offer fresh vegetables and dip, cookies, and bottled water. For the second session on WebQuests, we planned to offered pizza and bottled water.

ADVERTISEMENTS

We chose to create and distribute brochures with R.S.V.P. slips attached for both sessions (see evidence # 4A and 4B). We felt that brochures would allow us to include more information than a single-sided flyer would. The brochures clearly indicated the basic and necessary information, such as the title of each session; the date, time, and place for each session; the target audience; and the names of the facilitators. In both brochures, we included a brief description of the topic, reasons why the potential participants should attend the session, what they would actually do during each session, and the ODE Educator Standards that the sessions address. In addition, we advertised that we would be offering light refreshments and participation certificates for one contact hour that could be used in the future for license renewal. Both brochures included a few eye-catching graphics and were copied onto colored paper.

The brochures were distributed two weeks before the sessions were scheduled to be offered and we asked that the R.S.V.P slips be returned in advance to help us effectively prepare for the number of

participants that would be attending. Six people returned their R.S.V.P slips for the first session on digital photography and four people returned their slips for the second session on WebQuests (see evidence # 5A and 5B – hard copy only).

TOPICS OF INSTRUCTIONAL SESSIONS

Naming of parts:

Our Professional Development team, through much consideration and deliberation, chose topics with primary regard to the functionality, the practicality and the usefulness of each topic. While the main focus was usability, these topics however naturally lent themselves to the discussion of other intrinsically integrated issues such as are common in all educative situations, namely: legal implications, ethical and moral concerns and social ramifications.

The discussions of each issue surfaced in the planning stages amongst the Professional Development team and then carried over into the actual content of the sessions as we deemed appropriate, or, as they were raised by the audience members of the Professional Development sessions. Because the implications in each session with regard to these issues were different in many aspects, we delineate them here separately.

Session #1 Digital Photography and Photo Story 3 for Windows, the methodology of which will be described later in this article, presented issues that the team discussed in detail in all of the following areas.

Social – In addressing the needs of the Special Education Teacher we determined that the socialization of students in the program was a greater concern than it might be in the education of the mainstream or AP tracks student body. We agreed that students with special needs could make use of the Photo Story 3 program in lieu of an oral presentation in such cases where the student might display

high level of fear or anxiety over a public presentation. This would enable the student to deliver evidence that could be used as an authentic assessment while sparing that student unnecessary psychological trauma and stresses. The audience was open to this idea and supported it with comments in the affirmative. Teachers also suggested that, early in the year, introductory Photo Story 3 projects could build a sense of community in the classroom or provide parents with easy to decode update reports that might invoke greater levels of involvement with their student's education thus socially strengthening the ties between the institutions of *family* and *school*.

Ethical – We also determined within the development team that, for a teacher to have such a tool at their disposal and not use it might present an ethical dilemma, as might allowing Special Education student that were mainstreamed to use this program might invoke jealousy and instigate rancor among the rest of the students. We advised the audience of this dilemma and advised that best judgments should be used in those cases. Some classes might have no problems with alternate assessments whereas others might consider it favoritism and cause social division. Each classroom's social climate can best be judged by the individual teacher.

Legal – Issues such as obtaining releases for the photos they use, never using photos that might be misconstrued as offensive and refraining from using copyrighted music tracks were all addressed during the session. These issues seemed to be a mater of course for the audience members subsequently we did not spend much time on them other than to reiterate their importance and pause for reaction and questions. There were no questions.

Session #2 - WebQuests

Social – The social aspects of WebQuests that our team detected and addressed included WebQuests as: differentiated instruction, as paced curriculum, as a group project with assigned duties for each student and as an aide for students with extended absences (to preserve class continuity and

community). As special education teachers our audience is constantly searching for programs and activities that will effectively coincide within students IEPs.

Ethical - WebQuests offer myriad opportunities to differentiate instruction while simultaneously integrating technology into the classroom. The need of today's student for different stimulation than that which has been required by the student body in times past dictates that our methods must change with our students needs. Providing an integral multimedia component that is so desired by the students of today, yet that is so often missing in the curriculum, in a safe and directed environment was, among the audience members, thought to be a fantastic benefit. They seemed to say, with their varied, comments that they could use this teaching tool to fulfill their ethical and moral obligations to teach to their students' individual needs while leaving no child behind.

Legal – Our session touched on what a WebQuest is and what components are necessary to make an official WebQuest. The audience was informed about the basics of WebQuest design and the legal copyright infringement penalties and plagiarism penalties but, due to limits on our time together, more attention was devoted to ready made WebQuests. The audience was instructed with lecture and modeling how to sign up for services at WebQuest hosting sites and how to choose a topic. They were also admonished to review each webquest completely visiting each link just to be certain that the usually protected files and links have not been tampered with by outside entities.

RESEARCH THAT INFLUENCED THE SESSIONS

Digital Pictures and Learning

Research has shown that the use of pictures is closely linked with written or spoken text and that it increases the attention and recall of learned materials. While using pictures in teaching, educators should: (a) use pictures to support key points, (b) minimize distracting details in pictures, (c)

use simple language in conjunction with pictures, (d) closely link pictures to text, (e) include people from the intended audience in designing pictures, and (f) evaluate the picture's effect by comparing with materials response to materials (Host, P.S. et al., 2006).

Adding pictures to text can enhance the attention of the learners. Pictures can be used to direct learner attention to print text as they make it more attractive and appealing, especially to children. Pictures can also provide relief for the eyes on a page (EPIE institute, 1981). Levie (1987) noted that children prefer stories with pictures to ones with no pictures and audio-visual presentations are the most enjoyable and interesting if accompanied by pictures. Other picture qualities that Levie (1987) reviewed that affect the audience attention include color, complexity and ambiguity. Cultural factors and personal characteristics also affect the level of attention that the pictures achieve.

Levie and Lentz (1982) reviewed 155 experimental studies that compared the use of text and pictures with pictures alone. They concluded that comprehension was consistently better when pictures were linked to the information in the text. It also found that on average, students who were reading text with pictures learned one-third more than those who only used the text alone. The study also revealed that the average learning gained due to presence of pictures was five times greater in delayed recall than immediate recall; that learning gained from pictures was more pronounced for poor readers than for good readers; and that pictures facilitate the understanding of spoken information more than they help in written prose. The study concludes by indicating that pictures aid comprehension by providing content for organizing information in the text.

Carney and Levin (2002) found that pictures are mostly helpful with complex text and that students with limited prior knowledge are likely to be helped by pictures. They noted the importance of proximity between text and pictures. They also cited the importance of helping students interpret pictures and guiding the viewer to the most important parts of the picture. They finally noted that

cognitive style also plays a role. Students who are "imagers" profited more from addition of pictures than students who are primarily "verbalizers".

Picture prompts were used for students with multiple and severe disabilities to communicate expected behavior for task acquisition (Robinson-Wilson, 1977). They were also used successfully to teach students functional, vocational, community and domestic skills (Thinesen & Bryan, 1981; Wacker & Berg, 1983; Cihak, Alberto, Taber-Doughty, & Gama, 2006; Sanders & Parr, 1989). Picture prompts were also used to communicate appropriate academic behavior (Dooley, Wildzenski, & Torem, 2001) as well as class schedule behavior (Sower, Rusch, Connis, & Cummings, 1980). Teachers utilized picture prompts to facilitate a task by having students look at a picture and use it for independent performance.

Matson, Dixon, and Matson (2005) stated that functional communication training was the most frequently used treatment for children and adolescent with developmental disabilities. It included the ability to generalize communication skills to other settings and events of daily life (Schwarz, Garfinkle, & Bauer, 1998). Pictures prompts had been used successfully to communicate: (a) requests (Alwell, Hunt, Goetz, & Sailor, 1989), (b) breaks from tasks (Horner & Day, 1991), (c) conversational turn-taking (Hunt, Alwell, & Goetz, 1991), (d) initiating conversations (Kravits et al., 2002), (f) vocal imitation (McCathren, 2000), (g) preferences (Frea, Arnold, & Vittimberga, 2001), and (h) vocabulary (Wilkinson & Romski, 1994). Pictures were also used to increase social interaction with teachers (Bird, Dores, Miniz, & Robinson, 1989), nondisabled peers (Hunt et al., 1991), and parents (Koppenhaver, et al., 2001).

WebQuests

The WebQuest concept was created by Bernie Dodge and Tom March in 1995. Since then, it has been widely adopted in K-16 classrooms in more than 40 States and in 10 countries and regions worldwide (Zheng *et al,* 2007). Dodge defines a WebQuest as an inquiry-oriented activity in which all the information that the learner interacts with comes from resources on the internet (Dodge, 1997). It requires learners to interact with new sources of information until they make sense of them.

WebQuests help teachers create instructional and meaningful online learning activities and are generally constructed around a scenario of the students' interest. Typically a well designed WebQuest has six steps: (a) introduction; (b) task; (c) information source; (d) description of the process; (e) performance evaluation; and (f) conclusion (Zheng et al 2007). The learning process in the WebQuest model is scaffolded by the teacher using the six steps of the WebQuests and finally evaluated by the rubric that has been developed by the same teacher.

March (1998), noted that the scaffolding structure of the WebQuest enables learners to transform new information slowly, and therefore understand it better. He also notes that WebQuests require a high degree of collaborative work that helps learners in the development of social abilities. Some teachers have embraced WebQuests and believe they are effective because they inspire critical thinking and put learning into a context that was not possible before (Vidoni and Maddux, 2002).

Since its inception, the WebQuest has been embraced by many educators of all grade levels (MacGregor & Lou 2004/2005). Research has shown that WebQuests promote students' critical thinking, facilitate knowledge application, and develop student's collaborative learning skills (Dodge 1995; Brucklacher & Gimert 1999; Zheng *et al*. 2005). The findings of Milson and Downey (2001) conclude that WebQuests usually achieve the following when used in the learning process (a) they help students to engage in meaningful and dynamic learning by working as a team to solve problem related

to the real world; (b) they facilitate effective learning by providing structured resources to learners so they do not waste time engaged in fruitless searches; and (c) they enable teachers to effectively use computer resources in the classroom. Studies shows that WebQuests are supported by four underlying principles: *critical thinking, knowledge application, social skills and scaffolding learning* (Dodge 1995; Pohan & Mathison 1998; Brucklacher & Gimbert 1999; Vidoni & Maddux 2002)

The goal of any WebQuest should be to facilitate learner's analytical skills and the ability to transfer knowledge to new areas of study (Dodge, 1995). WebQuests are designed to support the critical thinking of learners by examining things from different points of view and proposing solutions with multiple approaches (Crawford & Brown 2002). Schweizer and Kossow (2007) explain how WebQuests exposes students to specific, open-ended activities that require high level critical thinking to solve problems. Vidoni and Maddux (2002) examined the framework of critical thinking which includes (a) skillful thinking; (b) responsible thinking; (c) non-routine thinking; (d) applying criteria; (e) self-correction; and (f) sensitivity. They concluded that the WebQuest model meets all the six elements of critical thinking, and therefore, it is a powerful tool to inspire critical thinking skills in students.

Dodge (2001) noted that WebQuests require students to apply the knowledge rather than retelling factual information. Research suggests that knowledge application is supported by effective use of information, retrieval of the prior knowledge to new learning and knowledge association (Pohan & Mathison 1998; Brucklacher & Gimbert 1999; Lacina 2007). Pohan and Mathison agree that making students apply what they have learned to new learning is one of the key elements of the WebQuest. Emphasizing knowledge application fosters knowledge association and promotes effective deep learning as seen in the WebQuest model (Brucklacher & Gimbert, 1999).

There is a strong connection between the WebQuest model and cooperative learning theory. Dodge (2001) points out that a well-designed WebQuest shares the same qualities as those of cooperative learning. Such includes positive interdependence, individual and group accountability, and interpersonal and small group skills in learning. Developing students' social skills usually enhances the ability for them to learn from one another as they perform the learning activities. A well-designed WebQuest utilizes the social skills of the learners.

Research shows that using scaffolding strategies positively affects students' achievements (Bereiter & Scardamalia 1984; Baylor 2002). Scaffolding is an important element in a WebQuest that provokes high-level thinking and organizing new learning. It also helps in connecting learning and enabling goal attainment using a structured approach (Dodge 1995, 2001; Schweizer & Kossow 2007). The role of scaffolding is to help transform what the student reads into a new form (Dodge, 2001). It is critical to consider this element in order to design an effective WebQuest.

SESSION #1: ***Basic Digital Photography in the Classroom: Using Photo Story 3 for Windows***

This session was held on Friday, April 3, 2009 from 2:30-3:30 pm at Fitch High School. We chose to use one of the technology classrooms that were equipped with 30 student computers and an additional computer that can project onto a large screen. The computers in this classroom are all connected to the Internet and have a port for connecting USB cables. The computers in this classroom also have Photo Story 3 for Windows already installed on them. As outlined in our brochure, we offered the participants light refreshments and a certificate for one contact hour toward licensure renewal (see evidence #6).

Description of Methods and Strategies

As mentioned, we decided to design and facilitate this session so that it could be conducted within one hour, which was our allotted time frame. Our outline for this session clearly shows how we broke up the hour into smaller increments (see evidence # 7).

We allotted: five minutes for presenter introductions, during which Jan used her familiarity with the audience to lend credibility to her team members; five minutes to provide an overview of the session and the goals, conducted by Jan; ten minutes to show an example of a slideshow that was made by Joe using Photo Story 3 for Windows; ten minutes for participants to import their own photos from their camera, a flash drive, or a cd that was facilitated by our entire team; 20 minutes for the participants to create, save, and share their own slide show, again facilitated by our entire team; and ten minutes to discuss ideas for use in the classroom, which was conducted by Abel. Upon completion of the session, each participant received a post-assessment survey and a session evaluation to complete and return (see evidence # 8A and 8B), as well as their participation certificate. Four out of six surveys and assessments were returned (see evidence # 9 – hard copy only).

Our intention with designing the session in this manner was to provide for the participants three critical elements that relate to adult learning theory.

First, they were able to see an example of a slideshow at the beginning of the session so they could begin brainstorming what they or their students could do with the program. This technique worked well. Immediately, the participants began sharing how they could use the program. Several ideas that came up were

(a) Gifts for students as a yearbook on cd.
(b) Instruction involving literacy using the text layered over the image.
(c) As an alternate to oration for class presentations for the special needs student.
(d) News updates for the school website from special interest groups throughout the school.

Second, the participants were able to have hands-on time with the program and actually create their own slide show with their own photos. We determined that this was a critical element to include in this session, because adult learners need to see a direct connection with their own environments, routines and classrooms. Without the personal connection that practice provides, adults generally do not consider themselves competent in a skill. Tactile interface tends to enforce that connection directly.

Third, the participants earned one contact hour for their participation that can be used for their Individual Professional Development Plan and future renewal of their teaching license. Since adults don't often care about or engage in activities in which they have no personal stake or hope of reward, our team pursued this matter until a useful practical reward of contact time was granted.

We incorporated and modeled technology into this session in a variety of ways. As an introductory activity and a focal point, we utilized PowerPoint slides to help organize the structure of the session (see evidence # 10A and 10B) and to maintain direction and momentum for the presentation in our limited timeframe. We also utilized the Photo Story 3 for Windows program to create and show a sample slideshow. We also asked the participants to send the slideshows that they created to their personal e-mail addresses, so we incorporated e-mail and Internet access as well. In order to complete this task, the participants had to take their own photographs and import them from a digital camera, a flash drive, or a cd. Every participant but one chose to bring their actual camera and a USB cable. One participant did not have any of the equipment or materials that we suggested they bring, so we loaned that participant a digital camera to use for the session. Some of the participants also were able to gain an understanding of what a file extension was and how different formats of the same file could be utilized for different purposes.

Throughout this session, the methods we utilized are experiential learning, multi-media presentations, modeling use of the technology, discussion, and some direct instruction when needed.

Resources, Feedback Provided, and Assistance Given to Audience Members

We provided a variety of resources, feedback, and assistance both during and after this session. The resources that we provided to the participants included the Photo Story 3 for Windows program, which is free to download from the Internet. We also sent them a copy of the "Questions for Discussion" PowerPoint slides (see evidence # 10B again) for future reference, as well as additional handouts about Photo Story 3 for Windows that we printed from the Internet (see evidence # 11). The topics of these handouts included "Create Your First Photo Story" and "FAQs about Photo Story 3". We provided these as a basic reference for the participants' first solo attempt knowing that questions and uncertainties often arise during initial uses. These handouts consist of specific directions and screenshots that could be used as a reference as needed. Attached to the handouts, was a note that thanked the participants for attending the session and the e-mail address of one of the facilitators. We encouraged the participants to contact us if they needed any additional help.

We provided feedback to the participants in a variety of ways. First, we provided verbal feedback by praising the participants when appropriate and encouraging them as needed. We engaged them in discussion throughout the session, both as a group and as individuals, as opportunities arose. We asked the participants, in verbal as well as written form, questions that directed their attention toward the progress they had made during the session.

In addition, one of the attendees was about five minutes late and got started after the rest of the group. This person also had trouble uploading pictures from her camera. This problem was addressed by one of the team members offering one-on-one assistance while the rest of the team continued on with the original plan. Once the problems were solved, the learner was able to join the rest of the group already in progress. Since learners dislike pointless waiting and downtime, it was integral to the

effectiveness of our session that the team worked seamlessly to resolve these technical issues while the session moved forward.

The topic of this session inherently lends itself to supporting the needs of all learners, as evidenced in the research portion of this project. Because our target audience was the special education staff, it was easy for us to assist the participants in understanding how digital photography could be used to support the needs of all learners. We discussed throughout the session, how digital photography in general and Photo Story 3 for Windows specifically, could be utilized to support students with reading, writing, and/or speaking difficulties.

SESSION #2: *Utilizing WebQuests in the Classroom*

This session was held on Wednesday, April 8, 2009 from 2:30-3:30 pm at Fitch High School. Since it served us well for the first session, we chose to use the same room for this session. As outlined in our brochure, we offered the participants light refreshments and a certificate for one contact hour toward licensure renewal (see evidence # 12).

Description of Methods and Strategies

Once again, we decided to design and facilitate this session so that it could be conducted within one hour. Our outline for this session clearly shows how we broke up the hour into smaller increments (see evidence # 13). We allotted five minutes for presenter introductions conducted by Jan; five minutes to provide an overview of the session and the goals facilitated by Jan; 15 minutes to show an example of a WebQuest and to discuss the components conducted by Abel; 25 minutes for the participants to explore WebQuest.org, view WebQuests by other teachers, and view free WebQuest generators facilitated by the entire team; and ten minutes to discuss ideas for use in the classroom conducted by Joe. Upon completion of the session, each participant received an post-assessment

survey and a session evaluation to complete and return (see evidence # 14A and 14B), as well as their participation certificate. Four out of four surveys and evaluations were completed and returned (see evidence # 15 – hard copy only).

We incorporated and modeled technology into this session in a variety of ways. First, we utilized PowerPoint slides to help organize the structure of the session (see evidence # 16A and 16B). We also utilized the Internet to show an example of a WebQuest and to discuss the necessary components. A projector and computer were used to model the activities for the learners as they participated from their own computer terminals. We also gave the participants an opportunity to utilize the Internet and to discover their own examples of WebQuests.

Throughout this session, the methods we utilized were experiential learning, multi-media presentations, modeling use of the technology, discussion, and some direct instruction when needed.

Resources, Feedback Provided, and Assistance Provided to Audience Members

We provided a variety of resources, feedback, and assistance throughout this session and after, as well. The resources that we provided to the participants include websites such as WebQuest.org, QuestGarden and Zunal.com, all of which are free to access on the Internet. We also sent them a copy of the "WebQuests in Teaching: What is a WebQuest?" PowerPoint slides (see evidence # 16B again) for future reference, as well as an additional handout that we printed from the Internet (see evidence # 17). This handout is a copy of a rubric, created and modified by Bernie Dodge, which can used to evaluate a WebQuest. This rubric was sent to all participants in response to a question that was asked on one of the post-evaluations; "What makes a WebQuest good or bad?" Attached to the handouts, was a note that thanked the participants for attending the session and included an explanation for the rubric we were sending to them.

We provided feedback to the participants in a variety of ways. First, we provided verbal feedback by praising the participants when appropriate and encouraging them as needed. We engaged them in discussion throughout the session and as opportunities arose. We also provided the participants with a note that thanked them for attending.

The topic of this session inherently lends itself to supporting the needs of all learners, as evidenced in the research portion of this project. Because our target audience was the special education staff, it was easy for us to assist the participants in understanding how a WebQuest could be used to support the needs of all learners. We discussed throughout the session how a WebQuest could be utilized to support students with reading, writing, and/or speaking difficulties. WebQuests and the products that are resultant of them can provide authentic assessments for mainstream students as well as for students with IEPs.

DISCUSSION OF STRENGTHS AND WEAKNESSES FOR BOTH SESSIONS

Strengths

There were three major areas that that we decided were areas of strength. These areas are:

1) Choosing to involve the right people in the initial planning stages of the process,

2) Several aspects of how we planned and executed the actual sessions, and

3) How our group members worked together and supported each other throughout the process.

In the initial planning stages, we discovered that additional people needed to be involved before beginning to actually design the professional development sessions. The steps we took to involve these people in this initial phase truly helped set us and the participants up for success. First, we met with the building principal at Austintown Fitch High School, Mr. Doug McGlynn, to make sure the sessions could be facilitated there. Then, we involved Mrs. Tina Kinnick, the head of the technology

department at Fitch High School and Mr. Tom Ventresco, the technology coordinator for the school district. Tina suggested that we incorporate the use of Photo Story 3 for Windows into our session on digital photography, because the program had already been installed on the computers in the commons computer lab and on computers in the technology classrooms. She also mentioned that it is free to download from the Internet and people could use the program from home if they wished. Tina also offered to let us use her classroom to facilitate our sessions.

To increase the usefulness of the knowledge from our session for our target audience, we wanted to install Photo Story 3 on all of the computers in the special education classrooms. There are administrative blocks however, on the network and teachers are not authorized to install programs themselves. With some coaxing, Mr. Ventresco agreed to install Photo Story 3 for Windows on each of the computers in every special education classroom.

After determining the topics of our sessions, we wrote a proposal that was submitted to Mr. Vince Colloluca, the Director of Curriculum and Instruction for the Austintown Local Schools, in an attempt to secure contact hours for the attending participants. After reviewing our proposal, Mr. Colloluca gave us his blessing and granted the participants one contact hour for each session.

Involving members of the special education department through the informal interviews and the surveys also helped to direct us in designing and delivering professional development sessions that were interesting and appropriate to the needs of the target audience. Involving all of these people in the initial stages of the process was critical to our success with these sessions.

There were several aspects of how we planned and executed the actual sessions that we also consider to be strengths. The fact that we requested R.S.V.P.s and that we knew exactly how many people would be attending helped us prepare for each session more effectively. We also anticipated that some of the participants might not have the proper equipment for the digital photography session

and were able to provide them with they needed so they could fully participate. The fact and that we had insight enough to bring extra equipment to the session helped everyone feel included and empowered to participate in the session. In addition, our PowerPoint slides, the Photo Story 3 slideshow example and the examples of WebQuests that we projected onto the large screen, helped keep us (and the participants) on track and focused. The copies we printed of the PowerPoint slides also doubled as handouts that we sent as follow-up material to help remind them about their experiential learning sessions.

The final strength that we wanted to mention was the fact that our team worked so well together throughout this process. We began meeting almost as soon as the semester began and followed through with meetings almost every other week. We truly shared the load in planning and implementing both of these sessions. In addition, each one of our group members brought something different and valuable to the table, whether it was their knowledge about a certain type of technology, or their ability to conduct research, or their ability to organize. We think that this also came through during the sessions. One of the prompts that we had to address was how we helped support the participants in addressing the needs of all learners, including diversity, cultural, language differences, and special needs. We believe that our group was a true example of how to do that. Our group evidenced all of the above. We achieved some modicum of synergy and our learners benefited from that, as did we.

Weaknesses

There were two major areas that that we decided were areas of weakness. These areas are:

1) The assessment gathering process

2) Several aspects of how we planned and executed the actual sessions.

In reviewing the data that we gathered, we found that it was difficult to compare all of the pre-surveys and post-surveys that were completed. In reviewing other evaluations after ours were designed, it has been determined that re-designing the surveys so that all of the pre- and post-information were contained on one survey would be a much better choice. We were happy with the actual content of the surveys, but changing the forms would certainly help stream-line the assessment gathering process and provide much more readily traceable data.

Another area of weakness was the way in which we planned and executed several aspects of the actual sessions. First, we determined that one hour was not really enough time to introduce new technology. With both sessions it seemed that the people who attended wanted more time. Although we told the participants that they could stay after 3:30 and that we would stay to assist them, everyone left at 3:30. Several people indicated on their evaluations that they wanted more time beyond the hour that we had planned. We have learned that when a professional development session involves hands-on time with the technology, the facilitators need to plan for the session to last more than one hour.

We were lucky in the fact that we had a small group for each session. The sessions may not have gone as well as they did if we would have had a larger group. We had to offer more one-on-one help than we had originally anticipated because there were several participants that had difficulty keeping up with the group. In addition, the participants seemed to want us to proceed through everything with them in a step-by-step manner, which works contrary to certain ideas within adult learning theory.

We had planned to give the participants more time to work on their own, but that is not what ended up happening! This might have occurred because the participants are so used to attending professional development sessions where the presenters go over everything step-by-step, that they just expected us to do the same. Perhaps this played a role in this enigma or possibly the group's general

unfamiliarity with technology as a whole influenced their learning needs. Overall, we feel confident that our professional development sessions were useful and effective for our participants.

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