A TEAM APPROACH TO PRODUCING MULTI-MEDIA LAPTOP AND VIDEO FORMATTED PRESENTATIONS

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ABSTRACT

This paper describes an alternate method of producing laptop and video presentations (Sophisticated Animated Presentations — SAPs). This method requires the development of graphic presentations with some degree of animation for general principle courses such as management principles or organizational behavior. The presentations will employ several graphic software programs and would be presented in two formats, video and laptop (disk format). The topics include basic management terminologies, theories and concepts dealing with the functions of management–planning, organizing, leading, motivating, and controlling. These short (five to ten minute) presentations cover a minimum of one chapter and describe basic concepts. As such, these presentations provide students with the basic concepts covered in the chapter. The material in the SAPs is basic. Faculty may prefer one textbook to another, but most will readily concede there are a variety of textbooks covering the same material for management principles. Thus, the SAPs should be generic in nature and designed so they can accompany a variety of text books.

THE PROCESS

Planning

The first phase in the process includes team meetings to gain a mutual understanding of the project goal and production process. This team approach employed four people: a team leader, graphic artist, narrator and sound technician. During team meetings participants establish time lines, determine important steps in the production process and clarify roles. In this example, the team leader develops the story board and script to convey the overall concept to a graphic artist. The graphic artist may expand the storyboard to convey the appropriate concept in artistic ways. The narrator reads the script and finally, the sound technician modifies the timing and audio for individual frames and slides.

Research

Research is an important element in developing the presentation. Maintaining currency in a particular field is a constant activity for most faculty. Since this activity requires the team leader to produce general concepts, reviewing a variety of textbooks and trade journals will be more helpful than reading scholarly journals. The basic concepts to be explained for this activity were planning, organizing, controlling, leading and motivating. These subjects are readily found in any principles of management text books, and the two latter concepts are also found in abundance in organizational behavior textbooks. Thus, after reviewing 6 - 8 textbook chapters describing planning, the team leader brainstorms a few concepts to be described in the presentation. Basic concepts for planning for example might include: What is planning? Why is it necessary to plan? How is Planning accomplished? Who is responsible for planning? And, when is planning done?

Education

Learning how to develop multimedia presentations and graphic software packages may be accomplished in a variety of ways, reading software manuals, interactive computer-based instruction using a multimedia delivery system (e.g. videos, CDs floppy disks), attending workshops and institutes, or by purchasing the software and learning through experience. Gaining expertise in the field generally requires about two years, or about 30 hours of course work. Using the team approach,

thorough knowledge of the graphics software is unnecessary, but it is important to understand what can and cannot be accomplished through graphics, particularly the limits of animation. For example Disney type animation requires 30 frames per second. Similar presentations generally require a team of graphic artists and technicians. In addition, writing for graphic presentations and animation requires the author to think in graphic terms. For many faculty who are trained writers, the process of developing highly visually oriented presentations is an anomaly. Thus, some authors may wish to obtain support funds to hire a team; other authors may be able to garner staff support.

Coordination

The team leader, who is the "academic" author, is responsible for developing the concept, the script, the storyboard, and for coordinating the efforts of all media people involved in the project. Coordination continues throughout the life of the project and includes a variety of tasks, most of which can be categorized as learning each step in the process and a lot of communication with technical and artistic experts.

Story boarding

Story boarding, or developing the storyboard requires only crude sketches to give the artist the idea. Since the graphic artist is the illustrator, drawing stick figures, caricatures, and line drawings are sufficient for the team leader to explain concepts to the graphic artist. This phase requires the author to be familiar with graphics programs, basic transitions and animation, and possess expertise in content knowledge. The time, effort and knowledge required of this task are equivalent to writing a book chapter, or a manuscript. The story boarding process used by this author is described as follows:

First. Extensive research and reading about the topic were required. The author surveyed a variety of textbooks and trade journals to gain current knowledge of basic management concepts and

theories. For those instructors who review and change textbooks every couple of years, this activity is a matter of course. Scanning the literature can help the author to reflect upon a few major concepts in a given content area. At the conclusion of this step the author/team leader develops a detailed script for each presentation, creates preliminary graphic designs, and communicates the presentation outline to the multimedia team.

Second. Developing the script, or scripting, requires the author to understand the uniqueness of animated presentations and to be visually literate. For sophisticated, graphic intensive laptop and video presentations, writing the script is quite different from writing letters, reports or manuscripts. Verbal information must be turned into visual communication. Initially, the narrative portion of a script is outlined. Then short sentences which highlight an action or that briefly describe the graphic are developed. In conjunction with this activity, the team leader constructs a sequential collage of graphics displayed on a single screen, or storyboard. The storyboard is probably the single most important step in developing a multimedia presentation. It describes concepts graphically; additionally, the storyboard sequences the action and avoids duplication or omissions.

Third. Producing sophisticated graphics that can be animated is next. A graphic artist, using the script and conceptual sketches of graphics translated from the storyboard adds animation and produces the first draft of the presentation. The presentation is volleyed back and forth a few times between the author and graphic artist. This was done "long distance" using a laptop computer as the communication link. During these vollies, changes in narrative and graphics were completed. This time consuming volleying is necessary for each presentation, but after the first presentation the multimedia team becomes more effective. This step takes the graphic artist about 40 - 60 hours, and additional hours for changes.

Fourth. Once the team leader and graphic artist finalize the graphics, a reader is selected to narrate

the presentation. The team leader works with the narrator ensuring the correct words are emphasized at the right moment to match the graphics, and flow of the animation. The reader receives a copy of the graphics and practices the narration using the author's suggestions, and developing the appropriate emphasis and timing.

Fifth. The team leader, working with a sound technician, selects the appropriate background music for the presentation. An audio mixer was employed to control the sound volume and mix. The mix, a combination of two or more sounds, included both the narration and the music. Because music should run continuously throughout the presentation, narration and music were recorded simultaneously on an audio cassette by the Television Production technician. In other words, while the sound is dubbed into the presentation, the reader must narrate the presentation. This requires careful monitoring for quality control, both by sound technicians and the team leader.

Sixth. To develop the presentation in laptop format, the Graphics Department combined the graphic presentation and audio presentation on a ZIP disk.

Seventh. To develop the presentation into video format an electronic switcher is used. The switcher converts analog signals into digital data. Thus, the graphic presentation was combined with the audio tape to create a 3/4" VHS tape.

This iteration completes the process for one presentation. The process begins again with the next presentation. And, while one presentation is in the planning phase, another presentation is in the graphics, or music /narration stage, so the project production process is uninterrupted.

Solicit feedback

The final phase of development uses student feedback to fine tune the presentations. There are several ways of soliciting such feedback. Play the videotapes in class and ask students to relate that information to the assigned reading, or give a short quiz. Another way to get student feedback is to wait until after the test has been given on the unit, such as planning, or organizing, then ask students, "what major concepts do you remember about planning?" End of the semester questions about the videos may also be helpful. Changes which attempt to modify the sound or narration will require a repeat of steps five through seven. Changes which attempt to modify graphics will require a repeat of steps four through seven.

LESSONS LEARNED

The following comments describe some of the lessons learned during the development and production phase of this team approach to the Multi-media presentation development process.

Animation, as done by multimedia at most higher education institutions, is not Disney level because of the significant investment in hardware, software, and training required. The creative input by "artists" is critical to producing sophisticated presentations, probably more important than the technology. Mastering high-tech animation software programs will still require "artistic" creativity to optimize the effectiveness of graphics.

There are many sophisticated animated software packages on the market. Most of this software requires long lead times to understand, let alone master. Some of the professional education programs whose outcomes included the ability to produce highly professional, graphically artistic, animated presentations, required two years to complete. Many higher education institutions, particularly those working in

consortiums contract services from expensive commercial companies to produce similar presentations.

Professional development for faculty in many higher education institutions includes a variety of computer related programs. Knowledge of basic programs such as Microsoft Power point may encourage faculty to experiment with more sophisticated graphics programs such as Corel Draw, Astound and Adobe Director.

Multi-media specialists have different technological skills than computer graphic artists. Multi-media specialists offer advice about adding music, developing the narrative/audio, and general production matters. They generally act as creative director. Graphic artists create artistically sound backgrounds, caricatures and graphics.

Producing video formatted presentations requires sophisticated graphics software programs, a computer with audio recording capability.

Although some faculty may be able to produce presentations on a computer screen, quality classroom presentations generally require a team of professionals with skills in multi media, graphics, sound, and television production.

These types of projects can help promote distance learning because they introduce the faculty to multimedia capabilities and limitations. The SAPs can be added to web page syllabi and streamed to students as needed.

Video tape versions of the presentations made from the computerized version are not quite as visually clear as the original. The reason is the monitor is generally a great deal smaller than the projected image

Laptop presentations may require a great deal of staff technical support. Also, it is prudent to set up the laptop and projector configuration before class to ensure the "show will go on." The more experienced

instructors use back up transparency masters when incompatible hardware or software problems arise.

SUMMARY

Creating SAPs using the team approach involves six main steps: planning, research, education, coordination, story boarding, and evaluation. During the planning phase team members discuss their respective roles. In addition, the team leader presents the overall idea of the presentation, in storyboard format, to other team members. Research refers to the information gathering process the author uses to produce general concepts and specific text for the presentation. Next, the author must be knowledgeable enough about software packages to understand what kind of visual material to expect and the degree of animation, etc. to direct the work of the graphic artist. Story boarding, developing a series of crude sketches, to depict concepts is the heart of the production process. This process provides an overview of the presentation to team members and offers the sounding board from which the team can discuss other options. During the final step, the author presents the videotapes to learners and requests feedback. Final changes are made accordingly. Highly effective laptop and video formatted presentations may be produced using resident graphic artists, or experts supported by grant funds.