

RESEARCH PROPOSAL

By Bill Lynch

Statement of the Research Problem and Rationale for the Research

As technology rapidly advances it is important that educators and technologists not only make resources available, but that they also coordinate efforts to insure cognitive development of students in combination with these resources. The creative process, an extremely important student skill can easily be overlooked or even abandoned in today's high-tech classroom. This paper proposes a research topic to investigate the creative process in relationship to current visual technology based classroom instructional trends. The relevance of this topic for educational technology and education in general is very apparent. Finding patterns and identifying trends in individual's attitudes and use of technology in the creative process can assist in the planning of educational programs and the subsequent effective use of visual communications technology.

The writer of proposal could find no current information regarding this specific topic and it is safe to assume that no consideration has been given to this area of research in the past. However, there are numerous psychological, technical and historical works citing relevant related topics and findings that may be cross-referenced to validate or confirm any findings that this proposed research may deliver. For a more detailed description of these resources please see the Brief Bibliography at the end of this document.

In short, the research problem (or hypothesis) is, "Utilization of technology in the classroom is changing the traditional creative process." The proposed research would focus on current classrooms, delivery of materials, student progress and attitude and student work delivered in combination with a variety of technological

resources. By pursuing this area of research the researcher will be adopting a sociological theoretical foundation that will help to identify patterns of content structure and delivery as it relates to the individual creative process. Subsidiary problems may very well be appropriateness of instructional methodology and related competency development of post-secondary learners using visual technologies.

Research Methodology

Research regarding technology and the creative process could be successfully observed using qualitative methods. There are many practical reasons for this topic that are associated with the nature of qualitative methods. One of which is that the students are engaged in a learning process that greatly affects future educational and professional development.

The students are also learning very practical aspects of using technology as a tool for a variety of creative endeavors. For this reason the strategy of Phenomenological Research appears appropriate as the emphasis is on the individual's subjective experience.

Setting up a qualitative study could consist of...

- I. Credibility
 - a) Persistent observation of student use of the Internet during the creative process.
 - b) Participation of peers with ranging attitudes to administer the observations.
 - c) To take place over several different courses and class sessions.

II. Transferability

- a) Detailed descriptions of the creative process should be discussed by several instructors, agreed upon and written down.
- b) Detailed instructions on the observation methods must be adhered to.
- c) Written descriptions of the class dynamics must be included with the results.

III. Dependability

- a) Students should be surveyed before during and after acclimation o the design process, course work and observations.

IV. Confirmability

- a) The same documents used for Transferability can be cross-referenced to find significant facts regarding the subject.
- b) Also, student work should support the data.

V. Authenticity

- a) All students within the courses selected will participate.
- b) The research is directed toward enlightenment of the student.

VI. Emancipatory

- a) The students will participate in the creative process as a group.
- b) They will do activities together on the same time frame.
- c) They will critique finished work and be critiqued by others.

Several analytical techniques incorporated with the research design could be employed to undertake this research project including experiments, observations, data collection, and surveys.

A proposed experiment could consist of evaluation comparisons of student work from groups of learners exposed to and utilizing various technological resources. For example a project would be assigned where students are to use references in the creative process for a design project. All groups would receive the same lecture, materials and have access to on ground sources. However, alternate groups will be encouraged to use the Internet for their research.

Data collected could be observation notes from the instructor, face-to-face interviews with students engaged in the process and most importantly student design work.

The student design work from groups exposed to and utilizing various resources in comparison to groups who have not could be analyzed by identifying effective use of design methodology within the project based upon established criteria. This could be incorporated with the interviews and notes mentioned above to find critical points within the process for further consideration.

The evaluation could be used to improve the use of educational technologies by finding out where and how in the creative process the media did or did not become an important factor for the student. This information could in turn be used for curriculum development.

Statistical information on student resource utilization during the design process can be gained from classroom projects.

Two variables can be identified by student design work where more or less of a predetermined percentage of time on task was spent doing online research. These variables can be described using the measure of central tendency: Median.

A dependent variable being that students in each of the classes are to create a design project based on the same lecture, examples and reference material exposure.

The independent variable would be the measuring (evaluating, including individual and group critique) of each class's design work with one having exposure to online resources in combination with on ground resources and another exposed only to the later.

The control variables would include, the same course for each group, "Digital Illustration", "Advanced Typography", etc., The same lecture on the creative process and student examples of the project to be completed. Also, the same learner characteristics and size of the two classes would be important control variables.

In statistical terms the association between the two variables could be described by complex relationships to instruction, resources and deliverables and/or simply by grade percentages relative to resource utilization.

A timetable for this research and completed thesis, including ethics approval consists of:

- 1) Initial investigation including establishment of participants, resource identification and initial surveys will be no longer than two university semesters.

- 2) Administration of the previously outlined research methodology will take place over a period of two calendar years (six university semesters).
- 3) Completion of thesis complete with ethics approval no longer than two university semesters.

Total time for the administering, documentation and conclusion of this research is not to exceed 4 calendar years.

Trial Table of Contents

1. Statement of the Research Problem and Rationale for the Research

- a. Introduction.
- b. Review of relevant research and theory, and the importance of the research.
- c. The research problem (or hypothesis).
- d. Indication of the focus of the research project.
- e. Subsidiary problems.

2. Research Methodology

- a. Description of the theoretical or conceptual framework.
- b. Analytical techniques and research design to be used.
- c. Timetable or project plan.

3. Trial Table of Contents

4. Brief Bibliography

Brief Bibliography

Secondary sources for review would be interviews and surveys from students, veteran professionals in the visual communications industry and teachers. As rapidly changing as technology is, observations of students within this field over even a short period of time would also be beneficial.

Primary sources to investigate include but are not limited to history of graphic design & visual communications books, periodicals and web sites such as:

Books

Meggs, P. The History of Graphic Design

Bunke, Timsley. Creative Process

Robert R. Trends and Issues in Instructional Design and Technology

Jonassen D. Computers as Mindtools for Schools

Jonassen, Peck, Wilson. Learning With Technology

Roblyer, Edwards. Integrating Educational Technology into Teaching

Mertens, D. M. (1998). *Research methods in education and psychology*.

Periodicals

'The Graphic Artist's Guild Newsletter': <http://www.gag.org/>

'TechTrends' offered by The Association for Educational
Communications and Technology: <http://www.aect.org/>

'Intercom' offered by the Society for Technical Communications:
<http://www.stc.org/>

Web Sites

Creative Technologies <http://www.creativetechnologies.org/>