

Research Project – EDTC 510

Topic

The focus of the project should be applicable to the professional setting that you find yourself in currently or hope to be in the near future. Given the theme of the course, the topic should also directly relate to educational technology in some form. The type of the research outlined below might be described as case study, descriptive study or qualitative research. The topic chosen should focus on a specific technology you have decided to utilize in your current or future instructional setting. Narrowing down your topic is an important step in the process. The “Use of computers in the classroom” would be too broad a topic, whereas “The Use of Reader Rabbit for ESL students” or “Graphic Calculator Integration in Trigonometry” might be better-focused topics. As you begin researching topics, more ideas may emerge and you can distill your topic even further depending on your findings.

The goal of this project is to provide a historical perspective regarding the research and initial development of the innovation, the adoption of the technology for your instructional setting, a review of any subsequent adapting of the technology by practicing facilitators of learning, evidence of the dissemination or diffusion of this technology to a wider audience, and reporting on the implications for the future development of this technology.

Emergence

This section of the research report will focus on the historical facts in the development of this particular technology. Some general questions that would be addressed in this section include:

- What led to the development of this innovation?
- Who were the main players in the development of this technology?
- What initial need or perceived need did this technology address in the classroom or the larger society?
- What major societal influences promoted the development and design of this technology?
- What were the initial goals for the use of this technology?

This section lays the groundwork for the rest of the paper. A foundation for subsequent discussion in the paper will be built upon a solid historical grounding in this first section.

Adoption

This section will address why education and instructional professionals have utilized this particular technology to facilitate learning. This section addresses the decision-making process professional educators have made for the subsequent inclusion of this technology in their repertoire of tools for learning. What instructional need(s) does the adoption of this technology seek to address? Who are the primary beneficiaries for the incorporation of this technology? Are there particular side effects (intended and un-intended) with the utilization of this particular innovation? What are the rates of adoption of this technology among professionals?

Adapting

Rarely does the utilization of a particular technology meet all the instructional needs of the learners in a particular setting. This section will speak to issues surrounding the adopters of this technology and how they have *adapted* the tool(s) in question to better address the learning needs for a specific environment. What are the modifications to the technologies that have been employed with the learners? Have these modifications increased the technology's effectiveness? What further efforts are needed or planned for regarding the adapting of this technology to the instructional environment to which it is intended? As in other sections of the paper, case study examples provide a powerful means of exploring the issues for this section of the paper.

Diffusion and Integration

This section deals with a larger view of the instructional practice utilizing this technology. Questions addressed in this section include:

- Is this technology widely utilized across different instructional settings? Why or why not.
- Does the employment of this technology better meet the learning needs of a particular audience? What are the factors that impact this integration into learning environments?
- Are the demographics of the professionals employing this technology a factor in the subsequent utilization of these tools?
- What do the professional learned societies say about the employment of this technology? Are there current research efforts underway dealing with the diffusion of this technology throughout the professional field?
- What evidence is there among local professionals regarding the utilization of this technology? Case study examples could support this section of the paper.

Future Implications

This section will take a forward look at this particular technology and extrapolate the possible outcomes for this technology. Does that impact of this technology look to become more pervasive across the learning environment, or does the future look dim for wider development and application of this technology? What factors look to impact the growth and vitality of this technology across the particular instructional setting that the author(s) is most familiar? What implications for the future seem important for practicing professionals similar to the authors of the paper? What further research issues are important when exploring the effectiveness of this technology for professional educators in the field?

Format for the paper

The final paper should be formally written utilizing APA style formatting guidelines. The paper should be long enough to cover the areas outlined above. Papers longer than 15 pages would be considered verbose, while fewer than 7 pages for the project would not provide adequate opportunity for clarity of depth. (pages totals refer to the "body" of the paper) At least 10 different sources need to be included in the Reference section of the paper. You are encouraged to consider submitting your paper to a professional journal in your field. The word-processed paper is due on the last day of class.