<div align="center">**Research Journal Quantitative Article**</div>

Introduction

Reference citation.

Rana, M. T., Lowerison, G., Schmid, R. F., Bernard, R. M., & Abrami, P. C. (2011). A multi-
year investigation of the relationship between pedagogy, computer use and course
effectiveness in postsecodary education. *Journal of Computing in Higher Education, 23*,
1-14.

Intended audience.

The article "A multi-year investigation of the relationship between pedagogy, computer use and course effectiveness in postsecodary education" in the peer reviewed research journal *Journal of Computing in Higher Education* is primarily aimed towards scholars and instructors in the field of distance learning, specifically in the higher education area. The article is written in the typical journal style for scholarly writing and is intended to be read in an academic setting but the content of the article is also very applicable to professionals and practitioners involved in many aspects of instructional technology, including online course development, implementation, and teaching.

Article topic.

This article addresses the topic of the relationship between the roles of technology and pedagogy in the modern higher education classroom and their effects on learning. The article compares the results of two studies, from 2003 and 2007, to see if students' perceptions of the

elements of an effective course have changed as new technologies have become more widespread and embedded in higher education.

Diagram

Problem statement.

"While research findings may be controversial with regards to the impact of technology on learners' performance, there is little disagreement about technology's place in the twenty-first century classroom (Selwyn 2007) and there is little prospect that its role will diminish. So it is important to assess how faculty member and instructional designers are addressing learners' needs in post-secondary institutions and the relationship between the use of these technologies and students' attitudes towards them, as well as how students perceive their relationship to course effectiveness" (p. 3).

Research questions.

This article addresses whether the relationship between three factors, course structure, active learning and computer use, and increased technology integration in the classroom have an effect on students' perceptions of course effectiveness. The article also address the question of if there are any differences in these findings between science and arts courses.

Methodology.

This study had two rounds of data collection. The first was in 2003 with 1,834 students in 87 different graduate and undergraduate courses at a university in Montreal Canada. The second round took place in 2007 with 1,866 students in 103 different undergraduate and graduate courses at the same university. The sample included a variety of science and arts courses. The

instrument used in this study was based off of the 14 APA Learner-Centered Principles and in its final form was a questionnaire which used a four-point Likert scale with 8 sections and 71 items which addressed course structure, active learning, time on task, learning with technology, perceived effectiveness of computer use, context of computer use and overall course perceived effectiveness.

Findings.

In the analysis of the data, descriptive statistics reflected increased technology use in all areas of in and out of class applications except for interactive software. The instrument used in this study was validated using factor analysis for both of the years in which the study was conducted. Using this analysis three new variables were named: computer use, course structure and active learning. Statistics were used to investigate the relationship between the factors and perceived course effectiveness.

Conclusions.

As the authors expected, technology use increased in and outside of the classroom from 2003 to 2007. The authors were very surprised to find that in-class technology use only increased from 17% in 2003 to 22% in 2007. The authors describe higher education classrooms as a "bastion of resistance" to technology in the classroom and believe teachers are the primary blockade to its adoption. The arts classes show increased use of cognitive tools, including interactive software and spreadsheets, but science courses, while cognitive tools were in use in a higher percentage of classes, actually had declines in these areas from 2003 to 2007. The authors find this trend disturbing as these tools have been shown in previous research to be pedagogically supportive uses of technology. In contrast to inside the classroom, the internet has

exploded as a resource and virtual library from higher education students taking both arts and sciences courses.

The factor analysis and regression analysis used in this study revealed that the three factors, course structure, computer use and active learning predict course effectiveness. Both studies revealed that the most important factor appears to be course structure with relation to students' perception of effectiveness. While the authors introduced several schools of thought regarding technology and learning in the literature review, the results support the theory that technology or media should be less important than pedagogy. The authors feel that computers are an important part of the modern classroom, but not as influential as course structure or design on course effectiveness.

Critique

I found this article to be an important piece of academic writing with regards to the importance of technology in the higher education classroom. The authors had a large amount of data taken four years apart and so they were able to display technology integration and how that may, or may not, change perceptions of course effectiveness. I believe that the conclusions drawn from this article, that sound course design makes effective courses regardless of technology are extremely important findings. Often with new technologies solid course development can be left by the wayside, but this study illustrates its importance despite changing technology. I would like to see this study continued, possibly in another four year interval in 2011 to see if the trends illustrated by the data in 2003 and 2007 continue or change as society and technology evolve.

<div align="center">**Research Journal Qualitative Article**</div>

Introduction

Reference citation.

Williams, K. C., Morgan, K., & Cameron, B. A. (2011). How do students define their roles and
responsibilities in online learning group projects? *Distance Education, 32*(1), 49-49-62.

Intended audience.

The article "How do students define their roles and responsibilities in online learning
group projects?" in the peer reviewed research journal *Distance Education* is primarily aimed
towards scholars and instructors in the field of distance learning. The article is written in the
typical journal style for scholarly writing and is intended to be read in an academic setting but
the content of the article is also very applicable to professionals and practitioners involved in
many aspects of instructional technology, including online course development, implementation,
teaching or training.

Article topic.

This article addresses the topic of how group roles are formed in college level online
courses. Much study has been previously performed on how students form roles in traditional
group work, but few studies have been completed which directly relate to the group project
experience in online courses. This study examined how previous findings may apply to groups
in online coursework and the similarities and differences of previous research with findings in
both the traditional and online learning arenas.

Diagram

Problem statement.

"The goal of this study was to explore the process of group role formation in online educational settings," (p 50).

Research questions.

This article first addresses the juxtaposition of the importance of working in groups in our society with some faculty members' reluctance to assign group work in online courses even though previous studies have illustrated that group projects are important and effective in the online environment. The authors then go on to state that little research has been done in the area of group roles specifically within online coursework and that they believe that more understanding of role formation will facilitate faculty and students in conducting group assignments in online courses.

Methodology.

The methodology used in this study was artifact analysis. Almost 600 pages of threaded discussion and chat logs from online courses using group projects were analyzed using coding. The coding used in this study was previously developed from an earlier study. Three researchers coded the chat logs independently and then shared their notes, ensuring a peer check process. The team then discussed the codes and collapsed the final data into themes. Using multiple investigators and more than one data source provided triangulation and validation of the data.

Findings.

In this study, four themes related to group formation emerged from the data. The first theme, testing the waters, was used by all students regardless of age or level of study to provide

initial comments and test their ideas. The next theme, Apologies as being nice, is a strategy students use to avoid conflict or negative feedback. It is utilized when students give an apology along with an excuse for not completing work. The next theme researchers found was Tag-you're it. This theme describes when the group sees the first person to comment as the leader of the group, even if that person had not planned to take that role. The last major theme is described as Struggling to find one's role, which is when group members attempt to clarify their roles without clearly stating them. This theme came about frequently when no one assumed a leadership position. The study also found that in the absence of assigned roles students formed their own, including leader, who keeps the group on task, wannabe, who wants to control the group without the responsibility of leading, agreeable enabler, who goes along with everyone else and takes on extra work when others fall through, coat-tails, who does little work and supportive worker, a member who follows through with assignments as instructed.

Conclusions.

The roles and themes that emerged in this study were very similar to previous research that had been done in this area, but unrelated to online environments. Results reveal that often times these roles come about through the group formation process of give and take within the group. Students struggle as reluctant leaders and others feel the need to use apologies to as excuses for not completing work, most likely in an attempt to keep a positive working relationship. The roles displayed three in the individualistic category, over more task or personal/social roles. This may be due to the more individualistic nature of Generation X/Net Generation over the Baby Boomers. Since this study was primarily involving females, additional research must be done to more fully determine the differences in male and female approaches to group work in an online setting. The results suggest that there must be balance between students

taking on and creating roles in groups and faculty directing the group experience in a more involved way.

Critique

Overall, I believe this was written in a way that explains the motivations and results of the study behind it. The authors used a fairly large amount of data, 600 chats and discussion posts, from 126 students in six different online courses at varying levels within the college curriculum. One issue I see with this article is the factor of gender in the results. The study had 118 female participants and 8 male participants. The authors do touch on this issue by mentioning briefly in the Discussion the rise of the Apologies as being nice role may be due to the percentage of women in the study and also later in the Discussion section that there is a further need to study the difference of male and female roles. While the issue of gender is briefly addressed, I believe this issue may have had a larger impact than the authors discuss. There was no information on gender differences elaborated in the Results section of the article.

From my personal experience in online and traditional courses I generally agree with the conclusions in the article. The authors emphasize the need for online students to have group experiences, but also for there to be facilitation in the group process, especially at the early levels in college. I believe this article paves the way for numerous areas of additional research. Future research could be led in the area of gender in the group process, positive and negative effects of group roles in online projects, and how having guidance from faculty affects the group process.

Introduction

Reference citation.

Green, T. (2010). Student created mashups. *TechTrends, 54* (6), 17-18.

Intended audience.

The article "Student created mashups" in the practitioner journal *TechTrends* is primarily aimed towards educators utilizing instructional technology in their classrooms. Because the article discusses the possibilities for students creating their own digital mashups it is likely directed for instructors at the secondary or post secondary level due to the level of technological skill required to complete that task. Additional audiences for the article include other professionals in the education field, such as course designers or technology coaches who work directly with instructors to implement learning opportunities using technology.

Article topic.

This article addresses the topic of students creating their own digital mashups to achieve a particular learning outcome. A digital mashup uses two different technological elements to create a new learning tool. The author had previously written a general article on the concept of digital mashups and focuses this article on examples that students have created. The author provides several examples of implementation of these digital mashups from his students and also examples sent from colleagues. These illustrations include using cartoon software to develop a website evaluation comic, developing interactive maps and several examples of mashups with video and other media elements.

Review of Article

The purpose of this article is to inform educators about the possibilities for implementing student created digital mashups in the classroom. The author highlights the potential that digital mashups have as a learning tool and then provides examples that his graduate students and other colleagues' students have used in the classroom. These examples include links and instructions for easy replication and integration for other educators.

The author makes two key points in this article. First, he states that using student created mashups has helped his students explore new media and given his students options for meeting learning outcomes. He also believes giving the students freedom to create their own mashups in ways that may be outside the intended use of the software has allowed students to engage in the learning process in ways the author would have never considered.

Overall, I agree with the author's position that student created digital mashups can be an effective and innovative learning tool. The examples provided in the article are extremely clever and are likely some of the cream of the crop of student created mashups. Even if students do not achieve this level of professionalism in their mashups, the experience seems to enhance learning on multiple levels. The students must navigate through new technologies in deciding how to create their mashup, employ new technologies to create it, and entrench the content of the course in their learning to create the mashup. I also appreciate that these mashups can have additional uses outside their creation by other students and instructors. While I do agree with the author's assessment that this is a valuable learning tool, It does seem that the author does not address any potential pitfalls with using student created mashups. I would have liked to have seen illustrated

in the article the concerns or issues that others have encountered when employing this learning strategy.

This article is presented in an entirely different style than the research articles. It is written in a casual, easy to read format so that educators can straightforwardly read the piece and take strategies to implement in their classrooms. The article does not present research or a study. The author instead details personal knowledge using this technology and also experiences from colleagues and other examples found on the internet. Since the article does not detail research, it is not presented in APA style or with typical research article headings. Overall, this article serves an entirely different purpose, as a practical resource for educators, rather than a research article.