# **Investigating Perceptions of Teaching Online & F2F**

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## Abstract

Comparison studies have focused a great deal on the similarities and differences between online and face-to-face learning. However, there has been little research on how faculty think about and plan differently when teaching the same course online and face-to-face. In this exploratory study, we investigated faculty perceptions about instructional practices in online and face-to-face learning environments. The results suggest that faculty need additional faculty development and/or instructional design support to combat misconceptions about what works and does not work in online learning environments.

## Introduction

Online education continues to grow each year (Dawley, 2007); in fact, it is estimated that 3.2 million students took an online course in 2005 (Allen & Seaman, 2006). As a result, more and more faculty are teaching online. While adjunct faculty have historically taught the majority of online courses, a 2005 survey revealed that as of 2005 "Institutions use about the same mixture of core and adjunct faculty to staff their online courses as they do for their face-to-face courses" (Allen & Seaman, 2005, p. 2). Online education is no longer a fringe activity; it has become critical to institutions long term planning (Allen & Seaman, 2006).

Online education is serving as a catalyst, forcing faculty to reconceptualize teaching and learning (Daugherty & Funke, 1998; Duffy & Kirkley, 2004; Speck, 2002). As more faculty teach online—whether it is a course they developed or a course developed by someone else—they are confronted with a host of decisions.

While to some degree good teaching is good teaching, teaching online is very different from teaching in a classroom. Palloff and Pratt (1999) caution faculty not to assume that strong classroom teachers will be strong online teachers. Salmon (2000) goes further to describe teaching online as an entirely new way of teaching. And while it is undeniable that the online environment presents some challenges that are not present in a face-to-face environment, it is also not unreasonable to think that a faculty member's past teaching experiences can and should serve as a foundation of knowledge—as supported by constructivist learning theories—when beginning to teach online for the first time.

For decades researchers have debated about the effect of technology on learning (Clark, 1994; Kozma,1994). For instance, Clark (1994) has essentially argued that it is the instructional methods, not the medium that makes the difference; Kozma (1994), on the other hand, has maintained that certain media do have the potential to improve learning.

The media debates, typified by Kozma and Clark, took on a new form with the rise of online learning and evolved into what many refer to as the "comparison study"; that is, a study that compares student achievement between online learning and traditional face-to-face learning environments. A great deal has been written on these types of "comparison studies" (Bernard et al., 2004; Clark, 1994; Meyer, 2002, 2004; Phipps & Merisotis, 1999). The majority of these studies, though, have resulted in what has been called the "no significant difference" phenomenon (Bernard et al., 2004; Russell, 1999), which suggests that there is no significant difference between online learning and face-to-face learning.

These types of comparison studies have been increasing since 1985, despite researcher's calls to stop them (Bernard et al., 2004). Researchers are critical of this type of research for a few reasons. First, the majority of comparison studies have failed to employ robust research designs nor control for extraneous variables that may impact student achievement (Bernard et al.; Phipps & Merisotis, 1999; Meyer, 2004). Second, comparison studies have often failed to take into account the fact that teachers teach differently online (Palloff & Pratt, 1999; Salmon, 2000; Wiley, 2002). As mentioned earlier, teaching online is different from teaching in a face-to-face environment (Palloff & Pratt, 1999; Salmon, 2000). Third, comparison studies unduly place face-to-face learning as the gold standard (Duffy & Kirkley, 2004; McDonald, 2002) when in fact, there are poor face-to-face courses just as there are poor online courses (Duffy & Kirkley).

For reasons such as these, many scholars have begun to argue that traditional media studies of comparing one medium to another is unproductive (Mayer, 2001). Mayer (2001) recommends that "instead of asking which medium makes the best deliveries, we might ask which instructional techniques help guide the learner's cognitive processing of the presented material" (p. 71).

While good teaching is good teaching to a degree—as illustrated in the work of Chickering and Gamson (1987)—teaching online is different than teaching in a face-to-face environment. As online learning continues to grow, we need to better understand how teaching changes when faculty teach online as well as—and perhaps even more importantly—some of the similarities and differences between how faculty design instruction in each format. As a result, the purpose of this study was to explore faculty experiences and perceptions teaching the same course in a face-to-face environment and online environment in an effort to better understand how faculty think and plan differently when teaching online than in the traditional face-to-face classroom.

## Method

A phenomenological research design (Creswell, 2000) was used for this study. A non-random criterion sampling (Miles & Huberman, 1994; Onwuegbuzie & Leech, 2007) was used to identify ten professors who teach the same course in a traditional classroom format as well as online at a community college in a Midwestern urban city. Basic demographics of the sample are listed in Table 1.

Rank	Department	Years teaching	Years teaching online	Gender
Associate	English	10	6	Female
Professor				
Assistant	Mathematics	3	2	Male
Professor				
Full	Philosophy	25	3	Male
Professor				
Associate	Mathematics	6	3	Male
Professor				
Associate	Economics	5	3	Female
Professor				
Associate	Psychology	10	3	Female
Professor				
Full	History	25	3	Female
Professor				
Assistant	Business	5	3	Male
Professor				
Assistant	Government	3	3	Female
Professor				
Assistant	English	4	4	Female
Professor				

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The professors were interviewed in person about their instructional preparation for face-to-face and online courses. The Each interview consisted of eight questions. For instance, one question was: What instructional strategies do you use in both online and face-to-face environments? Each interview lasted roughly 30 minutes. Conducting interviews in person enabled the respondents an opportunity to thoroughly explain the details about their instruction. The interviews were recorded and transcribed verbatim. The transcriptions were analyzed and coded by hand for trends and themes utilizing a constant-comparative analysis technique (Glaser & Strauss, 1967). Three researchers coded the data; to establish inter-rater reliability, the researchers met and compared their codes and themes for consistency and resolved any differences by reaching consensus. To strengthen validity, member checks (Morse, Barrett, Mayan, Olson, & Spiers, 2002) were conducted with each participant via email; participants were asked to review, clarify, and possibly expand upon the analyzed themes; any additional data provided was coded for trends and themes as well. This study was conducted by a group of doctoral students, led by a tenured faculty member, who were all part of a research lab at a western university.

# Results and Discussion

The central phenomenon investigated in this study was faculty experiences and perceptions of teaching the same course online and face-to-face. A number of themes emerged from the data.

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## Commonalities Between Formats

First, all of the participants identified certain strategies that they thought worked well in both the classroom and the online environment. For instance, a few faculty explained that they thought that individual and group assignments worked well in both environments; however, one faculty member did explain that "group exercises were sometimes better in hybrid courses." The faculty also found that deadlines were important in both environments for homework and tests. Finally, the participants explained that they thought that faculty, regardless of the learning format, must be friendly and smile. To accomplish this in an online environment, one participant described how she would use emoticons and smiling faces to replace the enthusiasm that students may perceive in a face-to-face classroom.

# Differences Between Formats

Some strategies emerged from the data that the faculty believed should be used only in one environment (i.e., face to face or online). For instance, all of the respondents stated a number of examples of instructional strategies or methods—such as, presentations to the class, and group discussions—that they used more often in a face-to-face classroom. In fact, nearly all the respondents felt that the use of student presentations were an advantage in the traditional classroom. One instructor put it quite plainly, by responding that "to just have them put together a PowerPoint and post that up there seems dumb." Indeed, without the ability to engage in discussion with other students, a PowerPoint presentation would appear to be useless in an online environment. Another instructor commented similarly, by stating, "You just don't get that good old-fashioned interface." Thus, in the classroom, instructors tended to use group and individual presentations more than in the online environment.

Regarding, effective discussions online, one participant responded, "in online I get a lot more students who are hesitant in their answers to questions I pose." Others concurred, that there was an advantage to having discussions face to face. For instance, they pointed out that the use of debates or brainstorming was not effective outside of a face-to-face environment because they believed these strategies require students to respond immediately. The participants also acknowledged their belief in the importance of having weekly assignments to keep students on task in the online environment. One participant confirmed that "assignments are given every week to make sure their not losing track." The participants also reported that frequent assignments, and deadlines provided a strong motivating force. The participants did not feel the need to have as frequent assignments and deadlines in a face-to-face class because they could gauge student progress easier in a face-to-face classroom.

## Changes in Teaching Because of the Formats

Finally, and in ways, most interesting, teaching online helped each of the faculty members think differently about both face-to-face and online teaching. Some of the participants responded that teaching online has reminded them of advantages of face-to-face instruction, such as the ability to respond directly to questions and demonstrate problems. Others stated that teaching online has broadened their awareness of student needs and methods to engage them. Some participants also noted that managing online discussions (and the fact that students might "blast one another in discussions" as one explained) has reminded them of the importance of classroom management. In fact, one instructor stated, teaching online taught her to "quickly stifle any student to student conflicts." Finally, teaching online has led the participants to integrate technology in face-to-face classrooms more than ever.

### **Implications and Limitations**

The results indicate and support previous claims that teaching in an online environment is very different from teaching in a face-to-face environment. While there are many instructional practices that can be done in both environments, each learning environment has its strengths and weaknesses. Further, even experienced faculty, can develop strong instincts—whether supported by research or not—about what works in each environment. For instance, faculty in this study

(i.e., faculty who teach both online and in the classroom) consistently believed that students in a face-to-face classroom benefited from synchronous face-to-face discussions. They explained that students in a face-to-face environment received quick responses to questions and could see problems demonstrated. The faculty also explained that even though group assignments worked in both learning environments, they assigned more individual written assignments, including research papers, in the online environment. More than anything else, this research highlights the need for faculty development initiatives, or access to instructional designers, that will help faculty move beyond assumptions like, "group work does not work online." Faculty need support to identify and leverage the strengths of each learning environment. As boundaries between online and face-to-face learning continue to blur, it is even more important that faculty recognize when and how to use certain tools and how to design instruction—regardless of the learning format—to maximize student achievement. Faculty often do different things online than in the face-to-face classroom (Wiley, 2002); and they should be encouraged to continue to do so but their instructional decisions should be based on best practices rather than over generalizations about what works and what does not.

One of the study's strengths is the fact that the respondents included a purposeful selection of experienced faculty. The interviews were from a sample of instructors that had experience in teaching in both environments. The analysis improved by clarifying the theme statements with follow-up interviews. A limitation of this study was the small sample size. While some qualitative researchers do not recognize the importance of sampling in qualitative research (Onwuegbuzie & Leech, 2005), we recognize the importance of sampling in all research. Although the respondents were experienced faculty, a larger sample would provide richer data to better understand how faculty think different as well as what they do differently when teaching the same course online as well as in a face-to-face classroom.

### Conclusion

Researchers and practitioners alike have argued that teaching online is different from teaching in a face-to-face environment. As a result, faculty are confronted with a host of decisions when designing instruction. Some of these decisions are as simple as, should you include group work or not in an online course? Researchers need to understand better the decisions faculty make and why they make the ones they do when designing instruction. The results of this study support previous claims that faculty do teach differently online than they do in face-to-face environments. Further, this study has shown that faculty, at least in this sample, often make assumptions—that are not supported by research—about what works or does not work in a specific learning environment. Part of the problem most likely stems from the complicated nature of designing and developing online courses; few faculty possess the pedagogical and technical skills to design needed to develop high quality online courses (Lowenthal & White, in press). Therefore, as online enrollments increase, universities need to continue to find ways to support faculty—whether through workshops or collaborative course design models (Lowenthal & White) in the design and development of online instruction.

Researchers must continue to study online learning. Enrollments in online learning continue to increase each year and the boundaries between online learning and face-to-face learning continue to blur. More specifically, researchers need to continue to acknowledge, focus on, and investigate the differences between face-to-face and online learning with a specific focus on variables such as different content domains, different types of learners, different pedagogical models, and different mixes of media used (Bernard et al., 2004, p. 383) that change across faculty, schools, and colleges. Specific research also needs to be done on whether or not or how faculty development can change attitudes and perceptions—and ultimately instructional decisions—of faculty who teach online.

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