

## **Where has the Time Gone?**

### **Faculty Activities and Time Commitments in the Online Classroom**

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#### **Abstract**

While research has examined the comparative time commitment required for online versus face-to-face teaching, little is known about the distribution of faculty time investment into the various aspects of online course facilitation. The purpose of this study is to examine the proportion of time faculty devote to each of the pedagogical components that are required to effectively teach an online course. A survey of fulltime online faculty reveals that online faculty, much like their face-to-face counterparts, spend the majority of their time grading, providing feedback, and communicating with students (including discussion threads and one-on-one interactions). Understanding the faculty time investment required to read and individually respond to student messages and written assignments may assist institutions in structuring online policies, course schedules and faculty development to ensure a balance between faculty workload and online course effectiveness.

**Keywords:** Online learning, online course effectiveness, faculty workload, online course facilitations

Online courses are a pervasive higher education reality. While instructors report positive impressions about the success of and satisfaction from facilitating courses online, there is concern among the teaching community that the time required to facilitate an online course is greater than the traditional, face-to-face classroom (Christianson, 2002; Sheridan, 2006; Van de

Vord & Pogue, 2012). Van de Vord and Pogue (2012) in their research contend that online courses encompass more instructor time in and out of the classroom. Sheridan (2006) proposed that online faculty spend more hours than traditional faculty in preparing and administering online courses (this is especially for new courses and faculty new to the online environment). Growing demand for online courses has created a need to better understand the activities that occur in the online classroom and the related instructor time commitment required for each. This study examines the investment of faculty time in various online teaching activities and examines factors that influence online faculty's time commitments.

### **Overall Time Required to Teach Online**

Research shows the amount of time required to teach online depends upon teaching field, type of course, course level, and other factors (Mupinga & Maughan, 2008). Aside from the number of students, there are also certain variables that impact faculty workloads in online education. Rockwell, Schauer, Fritz and Marx (1999) indicate that these factors include software and technology, instructional design, student-student interactions, faculty-student interactions, student experience with online courses, and faculty experience with online courses. However, little is known about the actual breakdown of time required to for each of the various instructional activities that comprise an online experience.

Teacher-student interaction has been identified as both the most important and time consuming aspect on online teaching (Mandernach, Forrest, Babuzke & Manaker, 2009; Tomei, 2004). Sword (2012) explains that instructors who previously taught face-to-face find challenging work in the constant individual email communication required to for maintaining online classrooms. This is a result of online facilitation's nature as a student-centered delivery style where the

number of students enrolled in a course directly correlates to the amount of time instructors spend facilitating (Cavanaugh, 2005; Mupinga & Maughan, 2008; Rockwell, Schauer, Fritz & Marx, 1999). “Across all activities the longer time spent teaching in the online format was mostly due to the individualized attention that the instructor provided to the students” (Cavanaugh, 2005, para. 23).

Some determinations have been made about the amount of time required to complete certain activities in an online setting as a function of number of students in the course. For example, Cavanaugh (2005) determined that each student in an online course requires an additional 6 hours and 46 minutes of time spent on instruction. Mupinga and Maughan (2008) report that the number of weekly office hours required per online course is approximately 7.5; but little information is provided to explain the instructional activities encompassed in the office hour time. The correlation between the number of students enrolled and the amount of time required to facilitate an online course has been established, yet current research fails to adequately outline a determiner of workload for online instructors based on requirements, expectations and instructional activities (2008).

### **Comparative Time Commitments**

In face-to-face classrooms the instructor uses the physical classroom as a platform to address curricular topics and objectives. In an online classroom with prescribed curriculum, however, the instructor becomes a facilitator of existing instructional materials and he or she must interact with students on an individual basis. Boerema (2007) identified specific activities that require more time comparatively. Specifically, the two activities identified include monitoring and contributing to discussion groups and posing and responding to questions. Rockwell, Schauer,

Fritz, and Marx (1999) found that faculty felt major obstacles to teaching via distance were developing effective technology skills along with obtaining necessary assistance and support.

The time spent in the online classroom is contingent upon instructional experience and the level of institutional support (Orellana, 2006). Orellana suggests that varied levels of technological savvy for both instructors and students result in an overall perception that online instruction is more time consuming.

### **Important Online Teaching Activities**

Williams (2003) identified 13 roles and 30 competencies that are important for online instructors.

These various online instructor competencies are basic skills or activities that are foundational but depend upon the specific role of the educator; however all instructors must demonstrate content knowledge, internet instructional tool skills, and instructional design skills for interactive technologies. Williams' findings are consistent with those of Mupinga and Maughan (2008).

Collaboration, teamwork skills, basic technology knowledge, and interpersonal communication skills are key competencies that result in effective online teaching (Boerema, 2007). Because of the individual attention required to facilitate an online course, instructors must spend significant time providing detailed, qualitative and quantitative feedback for students. They must also focus on providing individualized attention in classroom discussion forums.

Based on the available information of the reviewed studies, the time commitment required to facilitate online courses may be more than that required in a face-to-face classroom as a result of the individualized student attention instructors provide in discussion forums. Quality online instructors spend significant time providing detailed feedback for students and participating in online discussion forums. First time instructors have indicated that requiring student biographies

prior to class and communicating clearly about required technology and software is essential to promote effective teaching and learning (Yu & Brandenburg, 2006).

Mastery of the technology required to facilitate may also be important. One first time instructor indicated that many of her struggles resulted from providing administrative support for students in the form of “syllabus, required software, text, lecture topics, homework, and assignments” (Yu & Brandenburg, 2006, p.47). Information about these topics was all available to students within the learning management system, but both students and the instructor required additional support navigating the online classroom in order to successfully locate these items. Despite known barriers and required instructional tasks, little is known about the breakdown of time into various activities for instructors facilitating online. The current study seeks to provide insight into the breakdown of various activities deemed important in online facilitation.

## **Methods**

### **Participants**

Participants include 80 full-time online faculty (41 females, 39 males; mean age = 38.21) attending a required faculty development meeting. All attending faculty chose to complete the optional survey which represented 85% of the total fulltime online faculty at a university which requires them to work traditional 8-hour per day 5-day work weeks at a designated teaching center (fulltime online faculty work a 12:00pm to 8:00pm, Monday-Friday schedule). The sole obligation of the fulltime online faculty is to teach online courses; unlike traditional campus-based faculty, the fulltime online faculty have no required service or research obligations. Fulltime online faculty participants simultaneously teach four online, undergraduate courses during each 8-week term.

As shown in Table 1, the majority of the participants hold a master's degree and are relatively new to college teaching. The fulltime online position had only existed for 22 months at the time of the survey, so the maximum possible years in current position was 1.83. Thus, while the average years in the current position was also relatively low, a large number of faculty had held their current position since the inception of that role at the university. On a scale from 1 (extremely uncomfortable) to 7 (extremely comfortable), faculty indicated that they are quite comfortable with the learning management system ( $M = 6.29$ ), Microsoft Office ( $M = 6.23$ ) and the Internet ( $M = 6.45$ ), but slightly less comfortable with Web 2.0 technologies ( $M = 4.87$ ). Faculty participants represented a range of academic disciplines; see Table 2 for the complete breakdown of primary teaching areas.

**Table 1**  
*Faculty Participants' Demographic Information*

<b>Highest Academic Degree</b>		<b>Years College Teaching Experience</b>	<b>Years Online Teaching Experience</b>	<b>Years in Current Faculty Position</b>
<b>Master's</b>	<b>Doctorate</b>			
95%	5%	2.78	2.13	1.46

**Table 2**  
*Distribution of Faculty Participants' Academic Discipline*

<b>Primary Teaching Discipline</b>	<b>Frequency</b>
Education	17
University Studies	16
Religious Studies	13
English	9
Psychology	7
Math	6
Business	4
Philosophy	3
Leadership	2
Education	1
Fine Arts	1
Criminal Justice	1

## Materials and Procedures

An online survey was developed to measure faculty investment of time across designated instructional, assessment and management activities. The survey asked respondents to identify demographic information (age, gender), academic experience (experience with college and online teaching, comfort with online technologies), and estimate the percentage their 40-hour week spent on each of the specified online teaching tasks. Table 3 provides a listing of each instructional task. Participants were instructed to estimate the percentage of time (based on a 40-hour week) spent on each activity during an average week.

Table 3  
*Teaching Tasks by Instructional Component*

<b>Instructional Component</b>	<b>Teaching Tasks</b>
Grading & Assessment	Grading papers and assignments
	Grading discussion threads
Student Communications	Answering emails
	Answering phone calls
	Initiating one-on-one contact with students
Course Management	Dealing with technical issues
	Facilitating “questions for instructor” discussion thread
	Course management and administration
Instructional Content Development	Creating content-based resources for the classroom
	Creating how-to/instructional resources for the classroom
Teaching & Course Facilitation	Facilitating general discussion threads
Professional Development	Professional development related to academic discipline
	Professional development related to online teaching strategies
	Collaborating with teaching peers
Research & Service	Conducting research
	Committee work

## Results

As shown in Table 4, full-time online faculty reported spending the majority of their time on two teaching tasks: grading papers and assignments (36.93% of weekly time) and facilitating discussion threads (14.73% of instructional time). Examining this estimate as a function of the scheduled 40-hour week, this equates to 14.77 hours per week (3.69 hours per course) grading assignments and 5.89 hours per week (1.47 hours per course) facilitating discussion threads. The

investment of teaching time for the remaining portion of the week (approximately 20 hours) is listed in Table 4.

**Table 4**  
*Estimated Faculty Time Investment for Teaching Tasks*

<b>Teaching Tasks</b>	<b>Time Percentage per Week</b>		<b>Mean Hours: Week</b>	<b>Mean Hours: Course</b>
	<b>Mean</b>	<b>Standard Deviation</b>		
Grading papers and assignments	36.93%	18.42	14.77	3.69
Facilitating general discussion threads	14.73%	12.49	5.89	1.47
Grading discussion threads	8.74%	7.26	3.50	0.88
Initiating one-on-one contact with students	8.6%	6.86	3.44	0.86
Answering phone calls	7.78%	6.16	3.11	0.78
Answering emails	7.25%	5.46	2.90	0.73
Creating content-based resources for the classroom	3.59%	3.96	1.44	0.36
Course management and administration	3.35%	4.26	1.34	0.34
Collaborating with your teaching peers	3.28%	4.27	1.31	0.33
Creating how-to/instructional resources for the classroom	3.07%	4.03	1.23	0.31
Facilitating “questions for instructor” discussion thread	2.97%	4.13	1.19	0.30
Professional development related to your academic discipline	2.86%	4.91	1.14	0.29
Dealing with technical issues	2.19%	2.92	0.88	0.22
Professional development related to online teaching strategies	1.94%	3.07	0.78	0.20
Conducting research	1.08%	2.03	0.43	0.11
Other	1.06%	4.32	0.42	0.11
Committee work	1.05%	2.49	0.42	0.11
<i>Overall</i>	<i>110%</i>		<i>44.19</i>	<i>11.05</i>

When examining the estimated time investment across categories of instructional components, faculty reported spending the majority of their time on grading and assessment activities (18.27 hours per week or 4.57 hours per course per week) followed by student communications (9.45 hours per week or 2.36 hours per course per week). The full-time online instructional faculty reported spending the vast majority of their time on teaching-related activities with very little time, approximately 25 minutes each per week, on research or committee work (a distribution of time across teaching, research and service that is reflective of this unique faculty role).

To gain a more generalized perspective of where instructors spend their time in the online classroom, individual teaching tasks were grouped according to overarching instructional

components (resultant instructional components include: grading and assessment, student communications, course management, instructional content development, teaching and course facilitation, professional development, research and service, other); Table 3 highlights the teaching tasks by instructional dimension. The reported investment of time across instructional components clearly shows that faculty are dedicating the vast majority of their time to the day-to-day facilitation and management of currently active courses (see Table 5 for mean times per week across instructional components). Combining the categories of grading and assessment, student communications, teaching and course facilitation, and course management to reflect activities in currently active courses, faculty spend 92.5% (37.01 hours per week) of their scheduled work time completing instructional tasks in active courses.

**Table 5**  
*Mean Time Investment of Instructional Components*

<b>Instructional Component</b>	<b>Overall Time</b>		<b>Per Class Estimate</b>	
	<i>Percentage</i>	<i>Hours</i>	<i>Percentage</i>	<i>Hours</i>
Grading & Assessment	45.67	18.27	11.42	4.57
Student Communications	23.63	9.45	5.91	2.36
Teaching & Course Facilitation	14.73	5.89	3.68	1.47
Course Management	8.51	3.40	2.13	0.85
Professional Development	8.08	3.23	2.02	0.81
Instructional Content Development	6.66	2.66	1.67	0.67
Research & Service	2.13	0.85	0.53	0.21
Other	1.06	0.42	0.27	0.11
<i>Total</i>		<i>44.19</i>		<i>11.05</i>

## Discussion

Various online teaching activities were explored to determine the time commitments of faculty to facilitate an online course. Prior research (Mupinga & Maughan, 2008) identified a myriad of factors that impact the amount of time expended in the online environment; factors include instructional mode, teaching field, complexity of the course (whether the level is 100, 200, 300,

400, graduate etc.), number of students in a course and the level of dedication and engagement by the faculty member. The overall results of the current study indicate the time spent facilitating four simultaneous online classes is in excess of 40 hours per week and concurs with information retrieved from other academic sources that the overall time investment to teach online may be greater than its face-to-face counterpart.

The survey indicated that faculty spent 44.19 hours per week in teaching support (110%) of which only 5.38 hours (13.46%) was not directly related to the facilitation of active online courses (non-course related activities included: peer interaction, technical issues, research, professional development, etc.). The resultant 38.81 hours per week dedicated to direct classroom teaching highlights the extensive time commitment required for reading and responding to extensive volume of text-based discussions, one-on-one communication and written assignments typical of an online course. Gallien and Oomen-Early (2008) indicate that the time required in the online classroom is greater than the face-to-face (brick & mortar) classroom due to this shift in instructional activity and communication patterns.

Examining instructional time investment more closely, the study revealed that over half of instructors' time (20.66 hours; 51.66%) was spent grading papers and assignments (3.69 hours per course), and facilitating general discussion threads (1.47 hours per course). Other direct support elements of the online classroom consisted of 18.15 hours (45.35%) which included answering emails, questions for instructor, answering telephone calls, grading discussion threads and initiating one-on-one contact with students. The results of this study echo other research on time investments required for online teaching (Richard & Kuhne, 2008) in that the time

expended by online faculty in grading, feedback and other dialogue was higher than what might be expected in the face-to-face classroom.

Not directly explored in this study is the impact of class size. According to Orellana, “due to perceived higher demands of student-teacher interaction in online courses, many have considered that instructors' workload increases with class size” (2006, p. 232). This factor should be considered in determining the amount of time expended by instructors in the online classroom. In the current investigation, the average class size is 20; each faculty taught four classes comprising an overall student load of 80. Thus, an inference can be drawn that the class size does affect the time expended in the online classroom as it logically takes more time per student to grade assignments, respond substantively to discussion questions, answer emails, questions for instructor and telephone calls, as well as provide quantitative and qualitative feedback.

As indicated by previous research, there are likely a number of variables (i.e., discipline, experience, course level, etc.) that interact with class size and modality to impact instructor time investment in the teaching process. The results of this study indicate that discipline is not a contributing factor. An analysis of time investment as a function of teaching discipline (see Table 2) revealed no significant differences. Unfortunately, an analysis of time investment as a function of experience could not be examined due to the low rate of doctorate degrees of the instructors (5%) in this study and the limited teaching experience (years at college level and online) was significantly low (2.78 and 2.13 respectfully). While experience may have an impact, with two or more years of experience, it can be presumed this is sufficient experience to effectively and efficiently carry out the duties of instructor. Additional research should be

conducted to examine if time investment across the individual instructional activities shifts as a direct function of increased experience in the online classroom. In addition, this study focused exclusively on faculty teaching undergraduate courses; further research should examine graduate level courses to determine whether there is a differentiation between undergraduate or graduate level teaching hours and investment of time across instructional activities.

It is important to note that in this study, faculty were scheduled to work 40 hours per week; yet the overall average of the hours worked by the participants was 44.19 hours (116%). This overestimate of allotted time was highlighted in the open comments of several faculty; one noted, "*I realize that my percentage estimates are over 100%. This is not an error in math, but rather a reflection of the realities of teaching online; I often spend time beyond my scheduled hours interacting in my course and preparing new material. As such, my estimates are calculated on a 40-hour work week with the overages reflecting the additional time I dedicate to my online work.*"

Unique to the current study (in comparison with previous research on faculty time commitments), faculty in this investigation have uniform expectations for time commitments (40 hours per week; 4 simultaneous classes; 20 students per class) based on the employee contract. In contrast, many other universities allow instructional obligations to be determined on an individualized basis (i.e., instructor status as fulltime or adjunct, college guidelines, peer-review expectations, course level basis, class size) or provide minimal guidance on the expectations of faculty time investment for a particular course. Further research is needed to examine time investments of online faculty working in an adjunct position (which, according to

Orellana (2006) comprises the majority of online faculty) as minimal information is known about the comparative time investment as a function of the employment status of the faculty teaching the course.

While some findings were supported by previous studies, future research should examine the relationship between class size and instructors' workload and between class size and online teaching time commitment. Also, other areas to explore are the different course requirements and university requirements which could affect the online classroom. Unknowns include whether the expended hours affect the quality of the online instruction. Also, does the class size impact the number of hours required by the instructor, and does this in turn affect the quality of the online instruction?

### **Conclusion**

Research is in its infancy of understanding and identifying the variables that impact the instructional time required to effectively teach an online course. The current study raises as many questions as answers in relation to this issue. As the need for the online education continues to grow, it becomes increasingly important to understand the roles, obligations and requirements of faculty teaching online. Institutions must understand the investment of faculty time necessary to effectively facilitate an online course in order to effectively create online policies, schedule courses and train faculty.

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