Online Instructor's Efficiency: Why Can't We Do Better?

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Online education, though growing in popularity among students, often remains in need of quality delivery. What are the problems interfering with effective teaching? When students learn best? How can online instructors do their job efficiently? This paper addresses these questions.

Introduction

Online college learning has been on a steep rise in the last ten years. According to Ellan and Seaman, with all higher education enrollments increasing from 2007 to 2008 only by 1.2 percent, the share of students' taking at least one course online reached for the same time period 25.3 percent (Ellan and Seaman 2010). There are at least two reasons for that. First, the demand for online education has been paramount as many students, especially working adults, do not have the time to attend conventional classrooms. It is worthwhile to note, working adults (25 years of age and older) comprise about 40% of current college students (NCES 2008). As today's jobs require more educated employees who thus need further education, continuous professional development or preparation in new professions, many of them look for non-conventional educational opportunities. Online education offers a viable opportunity to satisfy job needs and accommodate to their hectic lifestyles. Second, numerous studies demonstrated that quality of online instruction is no more different than for face-to-face, and an increasing majority view the quality of online education as the same or better than face-to-face instruction (Ellan and Seeman 2010). Despite traditional educators' hesitation regarding the quality of online learning outcomes, online degrees have been generally accepted by all employers. Still, some concerns remain. One of them is poor time management – students often fail classes because they cannot organize their life around their learning (Marra 2002; Serdyukov & Hill 2009). Another concern is virtual education presents more opportunities for cheating (Rowe 2004). Without physical instructor's presence in the class students are tempted to use alternative ways of completing their assignments. Cheating is not limited to plagiarism or proxy participation alone: our survey of students taking online classes demonstrated, for instance, that many students do not use course textbooks trying to save on their cost and rely instead on web-based resources that are sometimes unrelated to the class or are of questionable quality. Students may also hire a tutor to do their assignments that they present as their own. Besides, students can voluntarily limit their participation in class discussions that are one of the most productive learning tools as long as it meets minimal expectations which reduces their benefit. All these factors reduce the quality of learning outcomes. A skillful online instructor can counteract these tendencies.

Instructor Performance

One of the major factors of ensuring quality learning in an online class is the instructor's professional performance (O'Neil 2006, Rothwell & Powers 2007, Palloff & Pratt 2011). In an

online class, as in a college classroom, much depends on the instructor's preparedness, attitudes, and behaviors. Regrettably, it may happen that students are motivated and hard-working, but the instructor does not provide the necessary input and support in the class. What are the typical failings of an online instructor? Research of patterns of participation in online asynchronous discussions (Serdyukov & Hill 2009), for instance, showed undisciplined or uninformed instructors may demonstrate minimal, formal involvement in the discussions, posting a few supportive messages without analyzing students' posts and making in-depth comments. They do not contribute their content expertise and fail to engage students in higher-level thinking. Their feedback is limited and ineffective. Some online instructors believe a threaded discussion is a self-sustained activity. They participate minimally, leaving the majority or even all of the work to students. On the other extreme, some instructors are too heavily involved in the discussions, which may cause students anxiety and limit their initiative. These issues stress the need for research in online teaching practices and the importance of preparing online educators.

Professional online educators are not specially prepared by universities. They usually convert from traditional university faculty and have to learn the new trade while teaching. Unfortunately, quite a few of them believe the change in learning format does not affect the teaching mode, and continue using the same instructional approaches and repertoire of classroom strategies. The online format, however, affects not only presentation modality of the course content, but also instructional methodology, strategies, activities, interactions among students, communication with students and organizational aspects of the learning process. Not only students study and behave differently in the online environment, but the instructor has to apply new tools and update his or her teaching style and performance. Here is a characteristic example of instructor's unpreparedness for online classes.

Recently we were involved in a discussion among university colleagues about various aspects of online learning. One of the debated issues was the amount of instructor's involvement in the online class activities, specifically, how often should the instructor participate in threaded discussions. The dilemma was, should instructors participate often, or would they rather be staying on the side letting students do their part and intervening only when there is a need to facilitate? Those in favor of active instructor participation used arguments like teacher modeling, mediating, engaging, supporting, while stressing the need to ensure instructor's visibility in the class, demonstrate responsibility, accountability, and best practices. Others who believed in less participation insisted that students should be given more freedom of expression, opportunities for self-management, drawing on their own motivation, thus arguing that instructor's interference in students' discussion may be a hindrance to their open communication among themselves. It was a typical educators' talk based on individual perceptions and experiences which was interesting to hear but did not stood a scientific test.

The dispute was resolved when we shared research data that demonstrated instructor's participation in the discussions correlated with the students' input but only to a certain point after which the time instructor spends in the discussions made no impact on student participation (Serdyukova & Serdyukov 2009). This was the finding of an original research conducted by the authors as a part of their continuous study of instructional practices at National University which will be addressed in more detail below. An academic dispute was resolved by using research

findings. Hence the need for instructor professional development that integrates research of instructional practices.

What, then, are the factors that help an online instructor to effectively organize and facilitate student learning while maintaining high academic rigor? We would like to focus on three major factors critical for student success:

- Instructor dispositions
- Instructor role modeling
- Instructor communication

Instructor Dispositions

Robinson (2008) uses *disposition* as a generic term for dispositional properties: powers, capacities, tendencies, liabilities, etc. (p. 1). Schussler, Bercaw, & Stooksberry, (2008) indicate that dispositions function as "an internal filter that affects the ways a teacher is inclined to think and act on the information and experiences that are part of his/her teaching context… This filter is shaped by a teacher's previous experience, beliefs, culture, values and cognitive abilities" (106). So, professional dispositions, as was found in the literature (Alawiye & Williams, 2010; Notar 2009; Schulte 2008; Sockett, 2006), relate to the teacher's educational preparedness and activities and include the ability to:

- Demonstrate sound knowledge of subject matter, expertise, culture, excellence in work, work ethics, professional conduct, and pride in the teaching profession and the job
- Act professionally and responsibly; model best qualities and behaviors
- Clearly articulate assignments, tasks, requirements, and feedback; ensure rigor of learning
- Create a safe, nourishing, and inclusive learning environment; successfully organize and facilitate class, team, and individual work
- Communicate effectively, both orally and in writing
- Provide effective support and constructive feedback to students
- Objectively assess student performance and knowledge
- Receive critique and feedback; be adaptable; provide collegiate support and feedback
- Show awareness of personal strengths and weaknesses; reflect on own behaviors; be willing to improve

This list is, certainly, incomplete, and includes only a few basic disposition that directly relate to the instructor's performance in the online class. These dispositions are expected of all instructors, and should be cultivated through reflection, continuous professional development and quality control effectuated by the peers and administrators. Many of the online instructor shortcomings mentioned above are an indication of inadequate dispositions. Instructor dispositions, as research demonstrates, may be crucial for student success (Harrison, Smithey, McAffee, & Weiner 2006); Rice 2003; Schussler, Bercaw, & Stooksberry, 2008). Greater teacher efficacy in online teaching appears to be positively correlated with certain exhibited dispositions and practices (Sheperd, Alpert 2011).

Role Modeling

Role modeling is actually a manifestation of the educator's competencies and dispositions that are reflected in the instructor's teaching style and often implemented not through direct teaching, but through a subtle and implicit effect that the combination of an educator's personality, attitudes, knowledge, behavior, teaching, and interactions with students and other people may have on their class. Bandura (1977) underlines a critical part role modeling plays in human behavior. His Social Learning Theory posits that people learn from one another via observation, imitation, and modeling. Lunenberg, Korthagen, & Swennen (2006) go on to assert that teacher educators must be intentional in their desire to be positive role models, must make their modeling explicit, link their practice to theory, and encourage their students to reflect on "the meaning of this modeling, and how it can help them develop their own teaching" (p. 589).

Online environments drastically transformed traditional instructor roles. An online instructor can be content facilitator, technologist, designer, manager/administrator, process facilitator, adviser/counselor, assessor and researcher (Goodyear, Salmon, et al., 2001); Aggarwal and Bento (2000) suggest that the teacher in the online environment also assumes the role of mentor. Though it is impossible to be a model in all these manifestations, students expect their instructor to be a true example in the facilitator, adviser, mentor and assessor roles.

Research on role modeling has identified a precondition for effectiveness, which concerns establishing a connection or rapport with students (Matthews, 2000; Wright & Carrese, 2002). In the absence of such rapport, it is less likely that students will accept and integrate the positive lessons that the role model wishes to impart. Establishing personal relationships can be more daunting in an online environment because communication is often text-based or otherwise mediated by technology, which can keep students isolated from their instructors as well as their peers. Therefore, it is incumbent upon the online instructor to promote and foster a sense of community and connection in order to enhance learning outcomes and the effectiveness of his or her modeling. Less formal "Introductions" forums, videoconferences (such as ClassLivePro), and even Skype discussions can be very helpful in this respect.

Explicit role modeling effect is demonstrated in every instructor's interaction with students, including announcements, discussion boards, chats, email exchange and comments to the assignments. Requirements for the instructor can include the following:

- Quality of communication with students should be open, meaningful, helpful and expeditious as much as possible; therefore the reaction to students' emails and posts in the discussions must be prompt, inviting and non-offensive, non-escalatory.
- The comments to student posts and assignments should be unambiguous, specific, courteous and supportive.
- The language the instructor uses should be literary, professional, courteous, rich, and linguistically and culturally correct.

So, the instructor models discourse and behaviors in the course through his or her own posts, prompts and responses to students' posts and in chats (Hill & Serdyukov 2010), as well as through other communication channels.

Communication in online learning

Current research in the field of online learning indicates that interactivity and communication are key factors in student achievements and satisfaction (Moore, 2007; Mahle, 2007; Wanstreet, 2006; Bruck, 2005; Salmon, 2002). Communication is a vital tool for any type of education, but it assumes critical value in online learning which separates the student from the instructor in both time and distance. "Researchers and practitioners are in general agreement that interaction is a key variable in learning and satisfaction with distance education courses" (Fulford & Zhang, 1993; Gunawardena & Duphorne, 2001). Mahle clearly states that "Instructors need to be cognizant of incorporating a significant amount of interactivity into their courses (Mahle, 2007, p. 47). Typically, the quality of online course outcomes can be affected by the quality of the interactions in class (Norton & Hathaway, 2008). Therefore, "learning through discussions or conversations is a fundamental part of teaching and learning, particularly in higher education" (Maurino 2007).

Interaction between students and instructors and among students is an indispensable component of e-learning. The outcomes of online classes, as has been demonstrated, depend to a great extent on the efficiency of student participation in these discussions and active modeling and participation by instructors (Hill & Serdyukov 2006, Serdyukov & Hill 2008). Online interactions may enhance student learning and influence their modes of thinking (Fainhole 1999), as well as negotiate, construct, and develop knowledge in the content area (Garrison 1989, Serdyukov & Hill 2004, Dominguez & Romero 2008). Our recent research demonstrates there is strong dependence between students' grades and the time spent in the discussions (Serdyukovs & Serdyukov 2009).

Class participation and interactions have been also identified as one of the key determinants of whether a student remains in an online class, which have notoriously high rates of attrition (Al Senaidi 2008). Furthermore, online discussion boards provide students with opportunities to be active members of a learning community; make connections to personal experiences and course readings and materials, express ideas and opinions relevant to the topic or prompt, demonstrate clarity of understanding the issue, depth of knowledge of the subject, and graduate level writing. There are various factors affecting instructor and student involvement in threaded discussions, and many different patterns that need to be investigated.

One of the major hindrances to effective online learning, however, is the quality of communication which, being mediated by computer, acquires not only a new form but also a new meaning and is challenged by many factors. Psychological and social disadvantages of the new educational format affecting communication among all participants in the online environment as well as learning outcomes in general are quite powerful and include:

- Lack of personal, face-to-face and continuous interaction
- Disappearing opportunities for personal relationship among participants
- Weakened social ties and responsibilities
- Fewer prospects for effective collaboration and reflection
- More sporadic, often delayed, sometimes ineffective and definitely less close interaction with peers and instructors
- Deficiency of eye contact, nonverbal cues and voice which can result in miscommunication.

Effective online learning outcomes can hardly be achieved without finding ways to cope with these challenges.

Both cognitive and social interactions contribute to knowledge construction which has the most pronounced effect in threaded discussions. From a constructivist perspective, discourse is a central mechanism for learning (Palincsar, 1998). Actually, these asynchronous discussions serve as one of the most effective mechanism of knowledge construction, where students post information, share their knowledge, comment on other students' and instructor's posts, express their opinions, add new information, and argue (Knowlton, 2001; Hmelo-Silver, 2003; Serdyukov & Hill, 2004).

The asynchronicity which is, in fact, one of the advantages of online learning, ensuring flexibility and convenience of learning, can also be a hindrance to developing relationships in online learning. It interferes with developing relationships that rely on at least some time to be spent together, i.e. simultaneity. Separation in time, as well as in space, is not helpful for developing relationships. Chats and videoconferencing offer some opportunity for that, but it is often difficult to organize a synchronous session as people take online classes primarily because they can adapt the classes to their busy life schedules. This eliminates almost any opportunity of people getting physically together. Still, one of the goals of online educators is to create the environment in which communication, collaboration and cooperation are an inseparable ingredient of learning.

Communication in an online environment serves a number of critical functions, such as

- Interacting among students and with the instructor
- Demonstrating student knowledge and sharing opinions and experiences
- Accessing collective knowledge and real-life experiences in discussions
- Organizing team work and group activities
- Constructing knowledge in collaborative activities (e.g., threaded discussions)
- Modeling (interactions, socialization, work, learning, behaviors)
- Developing relationships in the class

When designing and, especially, teaching an online class, the instructor has to integrate all these functions in his or her performance.

Threaded Discussion and its Role in Online Learning

Asynchronous discussion forums called threaded discussions remain one of the most effective interactive strategies in online learning (Danchak & Kenyon 2002, Serdyukov & Hill 2004, Swenson & Curtis 2003). Threaded discussions, due to their asynchronicity, offer opportunities unavailable in synchronous communication, such as depth of thought, integration of learning resources, e.g., research literature, analysis and synthesis, reflection, critical thinking.

Students in threaded discussions are expected to produce their posts addressing major aspects of the issue in question. The students' task is to provide analysis of the topic, express their opinions based on their own authentic experiences, and support it with explicit references to the course literature and materials. Research indicates that threaded discussions provide more consistent opportunities for participation, for revisiting the topic, deeper levels of student reflection, access

to a broader spectrum of ideas, more concrete connections to course lectures, readings and supplementary materials, and more ways for instructors to model higher order responses, monitor learning, and offer clarification and support for students (Gray 2002, Kirk & Orr 2003, Serdyukov & Hill 2004). Threaded discussion, when properly organized, can enhance knowledge construction through individual student posts addressing various aspects of the same topic, when each post contributes to the expected knowledge and all student posts in the discussion are expected to cover the topic in its entirety.

As a learning tool, threaded discussion can contribute to online learning outcomes through a number of functions, such as

- Communication among students and between students and the instructor
- Sharing, contributing and exchanging information and resources on the topic
- Generation of new ideas
- Knowledge construction
- Feedback, critique and assessment
- Writing activity (Serdyukov & Hill 2004).

This tool, however, is effective only when it is appropriately organized and used by both the instructor and students. This requires identification of main discussion characteristics, instructor and student preparation for the discussion, and guidelines or rules for participation. Appropriate methodological use depends on rational designing, planning, organizing, initializing, maintaining, facilitating, modeling and concluding the discussion. There are certain rules we use in our classes that help to achieve this:

1. Discussion topics or prompts must focus on critical issues of the course that are meaningful and relevant to the students
2. The value of the discussions for student learning must be made explicit in order to prepare students for active participation
3. Instructors must model best communication and demonstrate continuous involvement and support by posting messages addressing major questions discussed by the students, and offering critique, guidance and encouragement
4. Student participation in the discussion must be guided or directed by certain rules or expectations.
5. Students will be motivated to maintain active engagement in the discussion by the content and relevance of the discussion, involvement by peers, and by exemplary participation and explicit encouragement from the instructor.

Best approaches contributing to the effectiveness of the online learning are identified through research of instructional practices. An example of such a research is a particular study conducted in the online classes at National University the goal of which was to determine if there was any correlation between students' participation in threaded discussions and instructor's and students' time spent in the threaded discussions. This research was started with a hypothesis that students might be led by the instructor's example which models quality participation in the discussions, therefore expecting student and instructor time in the discussions to correlate. Actually, our hypothesis was confirmed but only to an extent: we found correlation to the point of 1779 minutes (about 30 hours) per student and 1593 minutes (about 27 hours) for the instructors in all

class discussions, with the total of students' time in the discussions exceeding that of the instructors. After that point, the amount of time instructors spent in the discussions did not seem to affect students' participation.

This research demonstrated it is critical for the instructor to actively facilitate the discussions. Excessive instructor presence, however, is not conducive for students' participation, however optimal participation in the discussions amounting to the breaking point of approximately 1600 minutes total (about 27 hours per class or about 7 hours per week which makes one hour a day of an accelerated, four-week long course) is desirable to ensure instructor's visibility in the classroom, demonstrate modeling, enhance motivation and provide support for students. It was also found the time students spend in the discussions reading, commenting on, and presenting their own posts ultimately correlates with their grades: the more they participate, the higher are the grades (Serdyukova & Serdyukov 2009).

Conclusion

Research demonstrates that online learning outcomes are greatly affected by the efficiency of the instructor's performance in the class. The quality of performance depends on the instructor's dispositions, quality role modeling and effective communication. These aspects of successful online teaching and learning can be improved through continuous professional development integrating research of current instructional practices.

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