Traits of effective instructors in an online setting

Phu Vu and Peter Fadde

Abstract - This article reports the preliminary findings of a study on traits of effective instructors in an online training program. Nineteen sections from five different courses were ranked to identify a group of five top-performing sections that were then compared to the group of other sections. The findings indicated that instructors in the group of top five sections spent more time in their sections than their peers in other sections. Instructors in the top five sections replied to learners' assignments and inquiries three times faster than instructors of the other sections.

Index terms - E-learning, online learning, effective instructors, effective online courses, traits of effective instructions

I. INTRODUCTION

E-learning is more and more popular in higher education because administrators consider it as an effective method to increase enrollment with fairly low cost (Maguire, 2005). However, the emergence of e-learning also poses a pedagogical question. Are instructors fully prepared to teach online?

Traditional learning settings differ from online learning in a number of ways, including instructor and student roles, interaction, communication, and flexibility (Young, 2006). A syllabus, curriculum and teaching technique may be effective in a traditional classroom, but it does not mean that they will also bring about the same established result in an online learning environment. White et al. (2003) held that unless traditional courses were reconceptualized using an interactive learning pedagogy, the results were '*nothing more than a correspondence course via e-mail and that simply transferring a traditional classroom-based course to an online format is doomed to failure*' (p. 172).

Quality of online courses is a growing concern among educators. Frankola (2001) revealed that although there were no national statistics, a recent report in the Chronicle for Higher Education stated that institutions reported dropout rates ranging from 20% to 50% for online learners.

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Several researchers (e.g., Motiwalla & Tello, 2000) have warned educational administrators about rushing to provide online programs, which may enable them to raise enrollments but that can overlook the maintenance or advancement of educational quality.

To that end, this study examines what characteristics, factors, traits, and classroom behaviors make an effective instructor in an online learning environment. The results of this study will help educational administrators develop better policies in evaluation of online instruction and recruitments of online instructors. In addition, this study will help online instructors know what works well and not in the online learning setting in order to improve their online teaching performance.

II. RESEARCH METHOD

Effective online teaching in this study is measured by two components: the frequency of learners' interactions in discussion forums and learners' final scores at the end of each course section. We examined five courses out of seven courses in an online program whose learners were elementary and secondary working teachers. Two courses were not included in this study because each of those courses had only one section. Among the selected five courses, four of them had four different sections and one had three sections. Thus, the total sections we examined in five courses were 19. Nineteen different instructors were in charge of those 19 course sections. Except for the differences in the teaching styles of the instructors, the curricular design of those 19 sections were exactly the same. One hundred and fifty learners used the same reading materials, completed the same assignments and took the same quizzes at the same time. Since each course was conducted on a monthly basis, these learners were randomly assigned to different sections every month.

To select sections for the top five out of 19 sections, one of the researchers conducted a tally of learners' interactions in discussion forums (criterion 1) and computed learners' final scores at the end of each course (criterion 2). We considered each entry in the discussion forum in each section as one unit of interaction regardless of its length and content. All 19 section were scored from 1 to 19 (1 is for the lowest and 19 is for the highest). Similarly, all learners' final scores at the end of each course were averaged and each section was scored from 1 to 19. Finally, scores in criteria 1 and 2 of each section were added up and ranked to identify five sections with the highest score averages of criterion 1 and 2.

III. FINDINGS

With this method of categorization, we could identify two groups in the 19 sections of the online program: a group of top five sections and a group of other sections (14 remaining sections.) Since there was no difference among those courses in term of section designs, course materials, assignments, quizzes and section requirements, the only independent variable that could affect the outcomes of each section was the instructors. Interestingly, we found there were several consistent similarities instructors in the group of top five sections shared. Firstly, under the permission of the administrators of the online program, we could get access to the course logs of each section in the learning management system (LMS) to track instructors' activities. We found that instructors in the top five sections spent more time in their sections than those in other sections. On average, they logged into their sections every two days and stayed there for approximately 20 minutes per login as shown in the table below.

Table 1. Time instructors spent in their section

Descriptions	Instructors in top five sections	Instructors in other sections
Login frequency	15 times/ section/ 30 days	12 times/ section/ 30 days
Time spent in the section per login	20 minutes/login	12 minutes/login
Total time spent in the section	300 minutes/30 days	144 minutes/30 days

We used a *framework for teaching: Domain 3* by Danielson (1996) to compare the quality of instructions by instructors in the group of top five and the group of other sections and found that there was a significant difference in instruction between instructors in the two groups. While the instruction in top five sections were consistently rated "*proficient*" or "*distinguished*", the instructions in other sections were consistently rated "*basic*" or "*unsatisfactory*". Specifically, "*distinguished*" instruction was defined as "*directions and procedures are clear to learners and anticipate possible learners' misunderstanding*". In contrast, "*unsatisfactory*" was judged for "*directions and procedures are confusing to learners*"

Finally, we compared time of responses to learners' questions or inquiries in the discussion forum between instructors in the top five sections and their colleagues in other sections. Thank to a trackable feature in the LMS, we could collect a time log of when each instructor replied to his or her learners' questions or inquiries in the discussion forum. We found that instructors in the top five sections replied three times faster than their peers. In addition, we used a model of three categories of feedback depth by Glover and Brown (2006) to examine instructors' feedback and responses. According to these researchers, depth of feedback could be divided into three categories: Category 1: An issue acknowledged, Category 2: A correct response provided and Category 3: The reason why a learner's response was inappropriate or why the preferred answer was appropriate.

The results indicated that instructors in the top five sections used feedback and responses in which a flaw was recognized, corrective advice was given, and explanations of the issues and the nature of the correction were provided. In addition, praise or a compliment was also included more often by instructors of the top 5 sections, serving to motivate learners. Instructors in other sections used feedback and responses that directed learners to the fact that a flaw was recognized, but no corrective advice was provided.

IV. DISCUSSIONS AND IMPLICATIONS

The findings of this study offer instructors and educational administrators several suggestions to help improve the quality of teaching and learning in an online setting.

Firstly, the result of this study indicated that effective instructors in the top five sections logged into their sections more often and spent more time there. It may be that frequency of entering the section and time spent there is an easily observed representation of the instructors' commitment to the course or section.

In addition to observations based on interaction "counts" in the LMS and qualitative value of the feedback provided, we also analyzed the instructions that were provided by instructors and found that instructors in the top 5 sections provided clearer guidelines for interaction with their learners. It is interesting that this also holds true in traditional learning environment where instructors are required to provide their learners with simple and clear instructions. Therefore, one of the criteria to rate online instructors' competences should be based on the quality of their instructions.

In summary, this study presents a few of the traits that instructors in the top five sections of an online learning environment exhibited. Although this is not a highly controlled experimental study, it has several features of an experimental study. Firstly, the learners and instructors were randomly assigned at the beginning of each section. Secondly, the contents and designs of each section were exactly the same. The only variable that made those sections different was the instructors. The findings of this study help educational administrators develop several readily measurable ways of evaluating online instructors based on LMS-tracked interactions, feedback provided to students, and posted instructions.

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