**A Comprehensive Framework with Design Principles for Supporting Interaction in Fully Online Courses**

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Online learning facilitates the student to control of their own study according to their time. Online interactive activities can assist learners to share and gain knowledge from each other. Online participation can measured the interaction between peers and instructors. Connected learning is increasing through all over the world. In the online classroom, knowledge is primarily generated through the relationships and interactions among learners and instructors. To increase the interaction between the learners and instructors Dip Nandi uses the online forums. There are much type of online forums and free applications like Skype in which you can chat and audio, video calls. A web-based learning present a more customized format in which instructor must meet with each student. The drawback of online learning is the lack of face-to-face interaction between peer to peer and peer to instructor.

Writer measure the student-student interaction and student-instructor interaction by analyzing the online chat forum. There are different type of sources like interview, observations and case studies for the qualitative analysis. Time is an important factor in Dip Nandi research. Author collects different data at the different places at the same time.

For Investigation of student activity and achievement author uses two phases. In Phase 1, he measure how active students are in online discussion forums and the correlation between this activity and the overall marks obtained in the subject. In Phase 2, he analyzes the effect of changes made to course management as a result of Phase 1. After this author analyze the data. It shows how many students are posting and assessing the forum during his session.

He should manage the content sequentially rather than the all content delivered in the first week. The role of instructor is more important because if the instructor answer the question then discussion is stop otherwise the discussion may be long. There are many students that not participate throughout the semester in the forums; as a result the grade of these students is not high. One of the focuses of this research is on the participation, quality of interaction of the students and instructors in the discussion forum. By analyzing the survey responses, several themes are uncovered which can act as a basis for designing quality online participation and several important features which affect the quality of participation.

This research has shown that, rather than designing a fully student-centered or instructor-centered discussion, a combination of both the approaches can be advantageous. This requires both the students and instructors to take responsibility to construct and share knowledge and ideas.

Now he analyzes the survey data according to the quality and productive discussion between the students and instructor. The survey respondents highly value this quality of asking questions and indicate that it is not only beneficial for the students who ask the questions but also for everyone else. And any student can answer the question. By answering the student there are many new ideas created in the other students mind. Monitoring of the instructor is very important in the forum and discussion is always based on the topic.

The last stage of this research is based on the student content interaction. Main focus in last part is to organize the structure in a proper and managed format, so that every student can easily access the whole data. There are two types of information is very important for every student who involve in the online learning. First is how to solve the assignment and second is regarding the submission of assignment. Writer should provide the separate tutorial for the proper information of how to use the website. The group should be small and consist of students of same geographical location.