

ABSTRACT

Online collaborative learning provides new opportunities for student collaboration in an online learning environment and at the same time spawns new challenges for teachers supporting group work. With the current Course Management Systems (CMS) such as Moodle, technology has provided online tools that include discussions forums, chat rooms, e-mails, newsgroups, workshops, etc. These tools provide a collaborative learning environment. To include constructivist learning in an online learning environment is a good collaborative strategy that is necessary since it engages learners in learning activities through interaction with their peers and teacher. A good collaborative strategy in an e-learning environment must primarily ensure that the expected interaction occurs in line with the learning mechanism being employed. This cannot merely be met by offering a set of collaborative software tools alone. It also requires the instructors' support. As the number of students studying online continues to increase, there is need to develop models that can improve online collaborative learning with minimal involvement of the instructor because the instructor might not be able to cope with increased number of students. To address this need, this chapter discusses a novel model for improving online collaborative learning that uses Machine Learning (ML) techniques.