Using a Wiki-Based Past Exam System to Assist Co-writing Learning Assessment with Social Network

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Abstract. The social network has been a very popular research area in the recent years. Lot of people at least have one or more social network account and use it keep in touch with other people on the internet and build own small social network. Thus, the effect and the strength of social network is a very deep and worth to figure out the information delivery path and apply to digital learning area.

In this age of web 2.0, sharing knowledge is the main stream of the internet activity, everyone on the internet share and exchanges the information and knowledge every day, and starts to collaborate with other users to build specific knowledge domain in the knowledge database website like Wikipedia. This learning behavior also called co-writing or collaborative learning. This learning strategy brings the new way of the future distance learning. But it is hard to evaluate the performance in the co-writing learning activity, researchers still continue to find out more accurate method which can measure and normalize the learner’s performance, provide the result to the teacher, assess the student learning performance in social dimension.

As our Lab’s previous research, there are several technologies proposed in distance learning area. Based on these background generation, we build a wiki-based website, provide past exam question to examinees, help them to collect all of the target college or license exam resource, moreover, examinees can deploy the question on the own social network, discuss with friends, co-resolve the questions and this system will collect the path of these discussions and analyze the information, improve the collaborative learning assessment efficiency research in social learning field.

Keywords: Social Learning, Social network, Wiki, past exam, co-writing, collaborative learning, assessment.

1 Introduction

‘Wiki’ is the Hawaiian word for ‘quick’. Broadly, wiki is a open and convenient editing tool for participants to visit, edit, organize and update website. The most well-known public wiki is Wikipedia [9], which is an online encyclopedia. The most
distinguished feather of wiki is that anyone can create knowledge on wiki at any time and place, and the intelligence of more creators is much greater than individual creators, it offers multidirectional Communications among creators[8].

After Web2.0 technology has been proposed, wikis have been widely used in the realm of education, and serve as a medium for collaborative learning. In a scenario of wiki-based collaboration, students are divided into groups and assigned tasks. [1], and everyone who use internet service in the world usually have one or more accounts of social network site in recent years, social network behavior in cyber world is become more and more important part in peoples life, if we can combine these two different but have same basic ideas web service, apply on blended learning to improve the learning efficiency.

In Taiwan, the higher education’s examinations past question just provide the questions but without answers, so the examinees must calculate the answer by itself. Or spend lots of money to join the tutorial, even search the answer on Wikipedia, also can not understand the problem solving process and learning with friends. Thus this MINE wiki service provide a community and customized edit tool to help examinees discuss and discover, make sure the answer and record the

The main method we apply in this research is based on the Prof. Trentin’s research[5], this paper is focus on the evaluation of collaborative learning project, he design a formula to calculate the contribution of each student in the learning group, also use the Wiki-like system to do the experiment, but most of this evaluation procedure needs the manual assessment by teacher. So there are many procedures can be improved, like system assist data mining, recording and calculating, reduce the assessment time for teacher, and help the student to learn the co-writing skill in social dimension then assess the contribution correctly.

In this study, we describe a Wiki Based Web system which provide online past exams about admission of master’s degree or PhD degree. And apply the co-writing assessment theory provide by [5] in this system to help other user understand which answer is the best one of the questions, is not learning in the group, but to use the social network, Students may search and have discussion with other register users in this system, if users doesn’t know how to resolve some questions, he or she can deliver to own social network to other friends who maybe know the answers or forward this message to their own social network until the question is resolved.

2 Related Work

In this section, we will discuss the past research about social learning or the system use wiki-based system to enhance distance learning.

In Web 2.0, one of the emerging visions is the “collective intelligence” where the folks are motivated to contribute their knowledge to solve common problems or to achieve common goal [7].

A Wiki is a type of social software that allows users to write, share and edit content real-time, with only rudimentary skills in web page creation. Anyone can edit and