

An Analytical Framework for Understanding Knowledge Sharing Process in Online Discussion Forum

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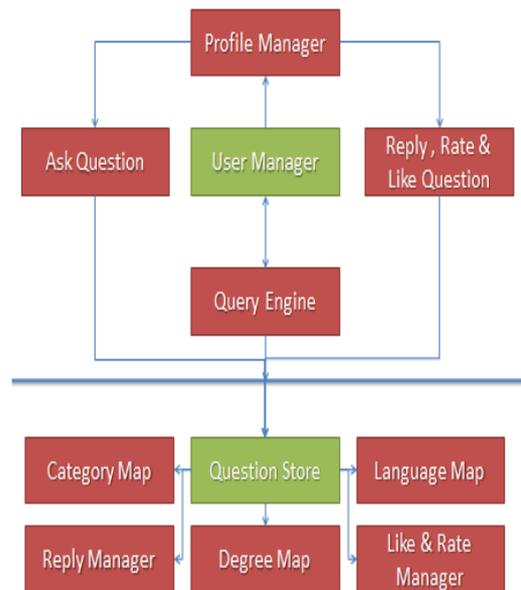
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ABSTRACT
 Online discussion forums have become a popular knowledge source for sharing information or solving problems. This study is an attempt to create a forum in order to understand the knowledge sharing process in online discussion forum. The format of interaction on the forum is entirely through questions and answers. The user post a question and other user reply directly to that questions. The questions and answers are posted within categories, degrees and languages. The effectiveness of the answers gets improved by means of likes and ratings.
Keywords:- Tags, Interest wise retrieval, rate, like

I. INTRODUCTION

Online discussion forums are well suited for collaborative learning systems. Much of the currently available research indicates that effectively designed collaborative learning systems motivate and enhance learning experiences of the participants which in turn lead to enhanced learning outcomes. This paper develops taxonomy of the asynchronous online discussion forums with the aims of increasing the understanding and awareness of various types of asynchronous discussion forums. The key attributes of online discussions and the factors influencing the discussion forum’s design are identified. It will also help researchers to understand the various features of the asynchronous discussion forums.

II. ARCHITECTURE DIAGRAM



III. FEATURES OF ONLINE DISCUSSION FORUM

The ultimate goal of developing an asynchronous discussion forum is to create an online learning environment that will achieve high levels of learning. In the following subsections, we present some of the main features that can influence and differentiate different types of the online discussion forums.

A. Degree of Interaction

The importance of interaction has long been recognized. In fact, it is suggested that the success or failure of asynchronous online discussions has to do with the quality of the predominant interactions and the depth of learning that occurs within the discussions. Interaction could mostly be between learners as well as learner to- experts. The expert should establish expectations regarding interaction, such as response time and frequency of participation; model effective interaction by being responsive but should generally get out of the way and let the learners do the work. Also, interaction can be encouraged by assessing discussion forums.

B. Participation Requirements

Participation in online discussion forums provides the learners opportunities for active learning through reading others comments, post their own questions, provide feedbacks to others posting, and provide answers. The extent of participation by both the learners and the experts depends on the aim of the discussion forum. Generally, learners participation in the discussion forum could be compulsory or non-compulsory. In the former case, participation is generally assessed while in the latter case it is not. In order to participate in the discussion forum the user must register to the forum by providing the details like name, phone number, email id and password .Once the user has registered in the forum a unique id will be generated for each user in the forum. The user can also update the profile. The user can add their interests in the forum.

C. Volume and Frequency of Posts

Asynchronous discussions provide learners reflection time and allow learners to share their own perspectives and analyse others’ views. The quantity of messages generated in the discussion is very important factor in making discussion forum attractive and manageable. As the message numbers increases, it can get difficult to manage effectively in order to assist learning. It can also lead to problems in identifying relevant content, digest and provide feedback. This can present the learner with the difficult task of sorting through often irrelevant and disorderly postings.

D. Tags

In the forum which we have created the question are added based on the categories, Degree and Languages. The question can be posted in various categories like Java, Database, .Net, Android and various degrees include B.E, MSc. The discussion forum not only meet the caters of people who knows English language but also the people of other language like French, Spanish, German, Japanese.

E. Discussion Activity

Discussion topic or activity factor is related to the design of the online discussion activity itself, such as whether learner contribution is a mandatory requirement, the awarding of grades for contribution, as well as the discussion topics, such as whether the topics are interesting and relevant. Asynchronous online discussions can be structured with defined topics and procedures or unstructured allowing learners to make free expressions of issues and ideas. It may be open, self-directed and unstructured.

F. Retrieval

The questions can be retrieved based on the categories, languages and degrees. The refinement of retrieval makes the forum convenient to the users according to the users interest.

G. Reply

The common characteristics of all discussion forums are that the participants post messages to a permanent location where they are preserved for others to read and comment at their convenience. Experts’ posting in the form of reply is found to be important in motivating students to contribute to the discussion and to learn. In particular, timely and substantive experts reply clears learners doubts and helps in understanding. Conversely, delayed corrective reply, infrequent reply, non-existent reply, irrelevant or negative reply can render an online discussion useless This can also impede effective learning.

H. Rate and Like

The Asynchronous discussion forum provides the users to like the questions posted and rate the answers .By means of likes and ratings the thread activity of the posts gets increased. By rating the effectiveness of the answer gets improved.

TABLE

Parameters	Discussion forum
Locus of control	Open to collaboration
Post	Are owned by people with equal Responsibilities
Aim	Aim is to provide support to public to discuss on any topic
Content (Static/dynamic)	It provide static content: once posted the posting doesn't change (answers are provided by others)
Way of display	Content is organized and

	presented in different ways
Answers	Required
Intent	The intent is decision making (used more to provide support)
Login required to see the content	Yes
Personal profile	Must give details such as name email id, Phone Number.
Content posts	Queries & answers

IV. TYPES OF LEARNING

Formal learning refers to hierarchically structured learning in which acquiring knowledge and skills at the official educational institutions through primary, intermediate and higher education programmes and informal learning describes a lifelong process whereby individuals acquire information, knowledge, values, skills, behaviour and attitudes from daily experience and the educational influences and resources from family neighbours and work place. In the present times, it is estimated that there is 20% knowledge is through formal learning and 80% is through informal learning

V. CONCLUSION

Discussion is usually considered a powerful tool for the development of pedagogical skills such as critical thinking, collaboration and reflection. Due to its perceived benefits, asynchronous discussion forums have become progressively popular in tertiary education. The asynchronous online discussion forum offer many pedagogical advantages such as encouraging reflection, analysis and high order thinking. It is

one of the effective tools for realizing collaborative learning activities that can enrich student’s learning experience in many ways. A well-designed online discussion forum can encourage students’ activity, motivation, and other social-constructivist attributes of their learning. In this paper, the key attributes of online discussions and the factors influencing the discussion forum’s design are identified. Taxonomy of the asynchronous online discussion forums based on constructivist pedagogical principles is presented. We believe that the taxonomy will help increase the online course designers’ ability to design more effective learning experiences for student success and satisfaction. It will also help researchers to understand the various features of the asynchronous discussion forums. The article concludes with implications for pedagogy and suggestions for the direction of future theoretical and empirical research.

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