M-Learning Web Site Architecture for Intellectually Disabled Lerner with Private EduCloud

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Abstract—*The EduCloud computing is the new technology that has various advantages and it is that technology reduces the cost effectiveness for the implementation. Language is changing all the time. The words we use to describe a particular impairment or disability change as a result of listening to people with personal experience and as a result of changing values and attitudes in society. In addition, the same words can have different meanings in different countries. Although we share a common language with countries such as America and Australia the words we use to describe particular disabilities related to learning are different. People can often find the term 'learning disability' confusing because there are several different explanations about what a learning disability is. Learning disability and learning difficulties are terms that are commonly used in the UK. These two terms are often interchangeable when used in the context of health and social care for adults. Some people with learning disabilities prefer the term learning difficulties. This is the better peak time to analyze the EduCloud and its implementation and better use it for the development of the quality and low cost education for all over the world. Mobile EduCloud Computing (MCC) which combines mobile-computing and EduCloud computing has become one of the industry buzz words and a major discussion thread in the IT world. As implementation of layered Private EduCloud computing is still at the early stage of development, it is necessary to grasp a thorough understanding of the technology in order to point out the direction of future research with smart phones.*

1. INTRODUCTION

This EduCloud computing is a type of computing that relies on sharing computing resources rather than having local servers or personal devices to handle applications. In EduCloud computing, the word EduCloud (also phrased as "the EduCloud") is used as a metaphor for "the Internet," so the phrase EduCloud computing means "a type of Internet-based computing," where different services -- such as servers, storage and applications -- are delivered to an organization's computers and devices through the Internet[7]. EduCloud computing providers offer their services according to several fundamental models: infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS) where IaaS is the most basic and each higher model abstracts from the details of the lower models. Other key components in

XaaS are described in a comprehensive taxonomy model published in 2009 such as Strategy-as-a-Service, Collaboration-as-a-Service, Business Process as-a-Service, Database-as-a-Service, etc. In 2012, network as a service (NaaS) and communication as a service (CaaS) were officially included by ITU (International Telecommunication Union) as part of the basic EduCloud computing models, recognized service categories of a telecommunication-centric EduCloud ecosystem.

2. SYSTEM ARCHITECTURE OF INTELLECTUAL DISEBLED LERNER

Its main objective is to contribute an original proposal for a functional architecture and service architecture for building standard-driven distributed and interoperable learning systems. This paper analyses current standards and proposals for e-learning system architecture. Its main objective is to contribute an original proposal for a functional architecture and service architecture for building standard-driven distributed and interoperable learning systems. The functional architecture defines components that make up an e-learning system and the objects that must be moved among these components [1].

We implement the service model with Web Services technology to provide a standard means of communication among different Learning management systems and different content authoring tools. This paper focuses on how to integrate Web Services on the e-learning application domain[8].

One strategy known to be successful is to integrate people with an intellectual disability by providing opportunities for auditing classes. Auditing is an approach whereby a person attends lectures in an award course for general interest (i.e. not for the purpose of completing the requirements of the award). Auditing does not include assessment, online learning material, or attendance at laboratory or tutorial classes. It can include access to the library and general campus facilities.
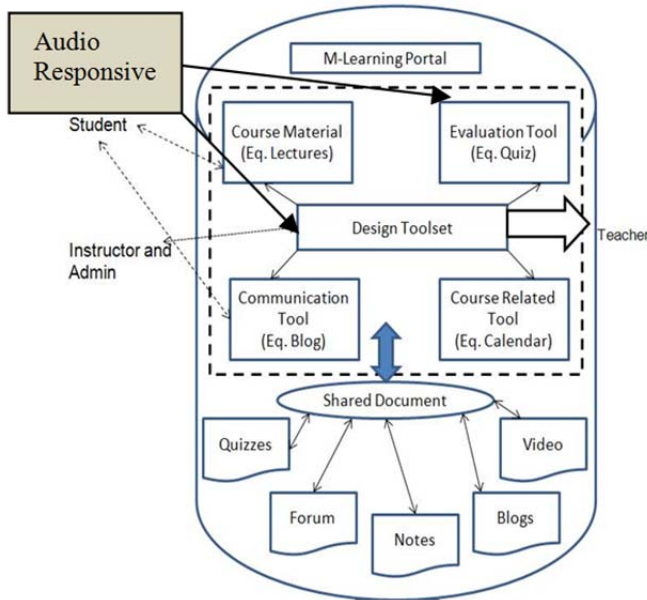
Fig. 1: System Architecture of ID Learners

3. LEARNING PORTAL FOR EDUCOLUD COMPUTING

Support interoperability for better collaboration of related LMSs to achieve learning task(s) of bigger scope support formal course composition methods for learning design to provide 22 better adaptive learning activities across LMSs Provide a learner-centric single and open portal for learners that is capable of incorporating learning materials from heterogeneous LMSs. Facilitate life-long learning in which a learner will access many LMSs during his/her learning career as well as the option of consistent scoring, tracking, accessing, and/or learning assisting methodology Several consortia contributed to the standards of reusing and sharing learning objects among LMSs, such as SCORM (sharable content object reference model), IMS (instructional management systems) and ULF (universal learning format), which defined the features of learning objects and facilitated the exchange of learning objects. Currently, many e-learning products support these specifications. However, the functionalities of learning systems hosted on decentralized platforms (such as learning assessment and complex interactive functions) still have difficulty communicating with others because each system's infrastructure is platform-dependent and non-interoperable[2]. The interoperability is the ability of two or more systems or components to exchange information and use the information that has been exchanged (IEEE, 1990). In this study, we highlight two interoperability problems in the e-learning systems.

Learning activity interoperability is the formal definition of learning activity such as learning path, learning strategy, and navigational sequencing, which can be shared and reused among compatible LMSs. The recent SCROM Intellectually disabled learners 2004 model defines several simple sequencing rules to be employed by teachers in incorporating learning strategies into the learning objects (The SCORM Intellectually disabled learners 2004 specification,2004). Carnegie Mellon Learning Systems Architecture Lab further developed ten templates to simplify these learning use cases to help SCROM Intellectually disabled learners users implement their learning strategy with ease and less cost. The IMS-LD model defines learning activities, support activities, roles, environments, learning objects, services, and their relationships to facilitate the designing and sharing of learning strategies (IMS Learning Design Information Model V1.0, 2003). Nevertheless, these specifications focus on describing learning strategies at the metadata level without providing concrete system architecture and external interfaces for e-learning systems to connect external learning resources and services. Workflow is also a popular approach to facilitate the learning activity.As the term suggests, this disability category encompasses a combination of conditions that may impact a student's ability to learn and achieve success in an academic setting. Students with severe disabilities are typically included under this umbrella terminology.
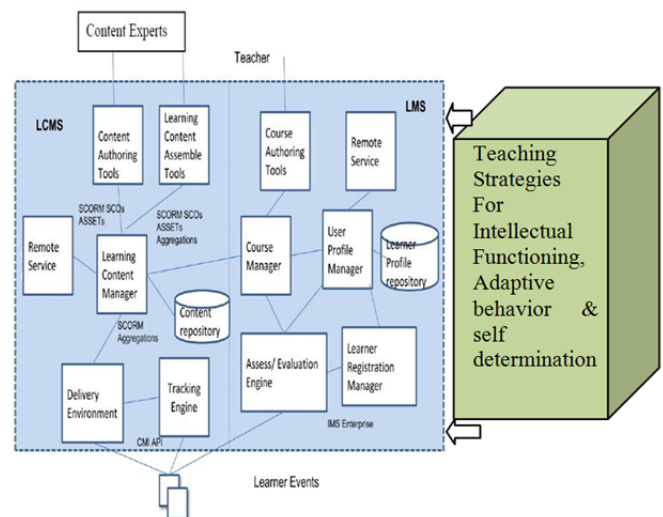

Fig. 2: System Architecture of LMS with SCROM 2004

Multiple disabilities are defined in one regulation as "concomitant impairments (such as mental retardation-blindness, mental retardation-orthopedic impairment, etc.), the combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the impairments." (34 C.F.R., sec. 300[b][6]).

4. FUNCTIONAL MODEL OF M-LEARNERS

To understand how different systems might work together, it is useful to have a simple functional model of an e-learning application environment. The functional model can provide a visual representation of the components that make up an e-

learning environment and the objects that must be moved among these components. SCROM Intellectually disabled learners a highly generalized model of a ―Learning Management System‖ (LMS) as a suite of Services that manage the delivery and tracking of learning content to a learner. But it does not specify functionality within the LMS[3]. The functional model we propose is strongly influenced by the SCORM Intellectually disabled learners functional model. We supplement some functions to make it cover most of the functions an e-learning environment should have, for the reason that SCORM Intellectually disabled learners only focuses on the function of delivery and tracking of learning content in LMS. We also divide the LMS which SCORM Intellectually disabled learners defined into LCMS. Management system) and LMS (Learning management system) to make each systems functionality more focused and clear. In the functional model, we also define which standards information should be interchanged among each component. The standards information focuses on the SCORM content model but is not limited to it. Fig. 2 below shows the functional model.

5.   CONCLUSION

The EduCloud computing can improve learning, and cloud learning can optimize human learning, to bring new ideas to the learner or changes on the behavior Help the students, staff, Trainers, Institutions using Smartphone. Mobile cloud learning – a novel unification of cloud and mobile learning. M-Learning on EduCloud is Anywhere-Anytime on premises. Finally it improve internet from intranet .It is important to know that despite difficulties in a learning environment students with intellectual disability can and do have the capacity to acquire and use new information. There is a range of inclusive teaching strategies that can assist all students to learn but there are some specific strategies that are useful in teaching a group which includes students with intellectual disability.

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