The effects of learning through multimedia devices – Review

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Abstract-- **There are so many research are going on this learning technology, however how to improve the learning through multimedia devices, here we are discussing about advantages and disadvantages learning through multimedia devices. The goal of study is here to learn the knowledge without holding the books, how is it possible to make the learner to listen hundred percent from the multimedia device. What will be the lack of knowledge to avoid minimum concentration? How will you promote or encourage the learner to not get lazy of using these devices, however here we are collecting the information regarding the leading devices through multimedia. These solution can be applied to various applications because of is simplicity.**

Keywords: increasing bandwidth, active teaching skills, Strategic of learning.

1. INTRODUCTION

The early stage we have a text book and direct contact from instructor for learning knowledge, after the new technology revolution is adapted for learning through multimedia. Multimedia is being used increasingly to provide computer based instruction. One reason for this trend may be the assumption that multimedia information helps people learn [4]. Here we are introducing the fault analysis of the learning in multimedia devices. Specifically, we investigate how cognitive agents can individually harvest knowledge (about other agents' behaviors and the available network resources) by learning from their local observations and information exchanged with agents, such that they can improve their network performance [1]. This may help students or learners through offering them the information in channels and methods that can be easier to understand, deal with, and retrieve [10]. Our goal is to present the current challenges and solutions from a few different perspectives and cover a sample of related work [2]. There is a lot of misinformation circulating about the effectiveness of multimedia learning, some of it seemingly fabricated for convenience. As curriculum designers embrace multimedia and technology wholeheartedly, we considered it important to set the record straight, in the interest of the most effective teaching and learning [3]. We consider a trend, or technology theme to be a candidate for my list if bringing the technology into the market has the potential to be disruptive to learning as usual something much more than just evolutionary improvement [6]. The capacity of multimedia is broad and inclusive. It even permits us to provide presentations by human instructors that have been "recorded" on video and presented on a computer screen as well as all instructional methods, including interactivity between instruction and learner [5]. Teaching methods is the subject of many research papers in this field in trying to evaluate methods to improve students' ability to be interactively is involved in the class. This seems to be particularly necessary in the current Internet, wireless, etc connectivity environment where students can be distracted through having or using those tools [10].

2. CASE STUDY

Multimedia instruction is one of the current examples of a new area of instructional research and practice that has generated a considerable amount of excitement [5]. According to the research survey there are many solutions have found to rectify of lack of learning through multimedia devices. While the origins of the multi-agent learning field were to develop descriptive models in artificial intelligence, social systems or robotics, the proposed interactive learning solutions developed as part of our research will be instead used as a constructive solution to design and guarantee by the multimedia interaction in communication networks [1]. Offering those alternative methods of teaching can be helpful particularly for people with special needs, or students in rural areas where they can have virtual or remote instructors especially for majors that have shortages [10]. Learning structured models to account for natural data dependency or model hidden topics, handling rare classes, leveraging unlabeled data, scaling to large amounts of training data, and finally leveraging media semantics in retrieval systems[2]. As we strive to make sense of unimaginably large volumes of data, visualization has become increasingly important. Most of the published research studies have been of short duration and were specifically designed for research analysis, but have demonstrated the veracity of these principles [3]. This paper reviews studies from a wide variety of fields to show that

multimedia -may be able to help people learn more information more quickly compared to traditional classroom lecture [4]. The mass array of multimedia learning devices such as the iPad, iPhone, and Kindle hold the potential not only to replicate traditional textbooks but also to provide for a social interface component [9].

3. PROBLEM ANALYSIS

In this section we analysis the problem and fault of the multimedia devices and how to tolerate the learning. Our research is one of the first in the literature to design interactive learning solutions that enable foresighted, anticipatory interaction of users in communication networks [1]. Multimedia data are being captured, stored and shared at an unprecedented scale, yet the technology that helps people search, use, and express themselves with these media is lagging behind [2]. Our brains are wired to process visual input very differently from text, audio, and sound. Recent technological advances through functional Magnetic Resonance Imaging .While the field is still evolving, researchers have shown that significant increases in learning can be accomplished through the informed use of visual and verbal multimedia learning. [3]. Multimedia is the use of text, graphics, animation, pictures, video, and sound to present information. Since these media can now be integrated using a computer, there has been a virtual explosion of computer based multimedia instructional applications. These applications run the gamut from serious computer-based tutorials for adults to the new category of "edutainment" products for children. These very diverse applications seem to share common assumption-multimedia information helps people learn. Multimedia instruction may have more interactive than traditional classroom lectures [4]. “Multimedia” usually refers to the capacity of computers to provide real-time representations of nearly all existing media and sensory modes of instruction[5].The problem of access control is difficult when the content is being distributed to a group of users since the membership will most likely be dynamic with users joining and leaving the service. Unlike unicast communication, the departure of a group member does not imply the termination of the communication link [8]. Multimedia technology is probably one of the most exciting innovations in the information age. The rapid growth of multimedia technologies over the last decade has brought about fundamental changes to computing, entertainment, and education (Norhayati & Siew 2004) [10].

4. STRATEGIC OF LEARNING

From a network perspective, designing network interaction rules and protocols that enable such agents to achieve Pareto efficiency with minimum information exchanges is another key challenge [1]. The bottom line is that students using well-designed combinations of visuals and text learn more than students who only use text [3]. Multimedia based instruction may force the instructional designer to better organize and structure the learning material compared to traditional classroom lecture [4]. The time limit for the multimedia object transmission specified by a user [7]. Communication makes it difficult for an adversary to gather information [8]. Modern education and communication environments can offer alternative ways in the learning process. Multimedia has been widely used in educational technologies. It is also expected that future will see more of the utilization of such tools in education. Some argue that multimedia and e-learning tools can be used as a supplement to traditional classes (and not as a replacement). Using interactive multimedia in the teaching process is a growing phenomenon. It plays a very important role in assisting students in learning processes [10].

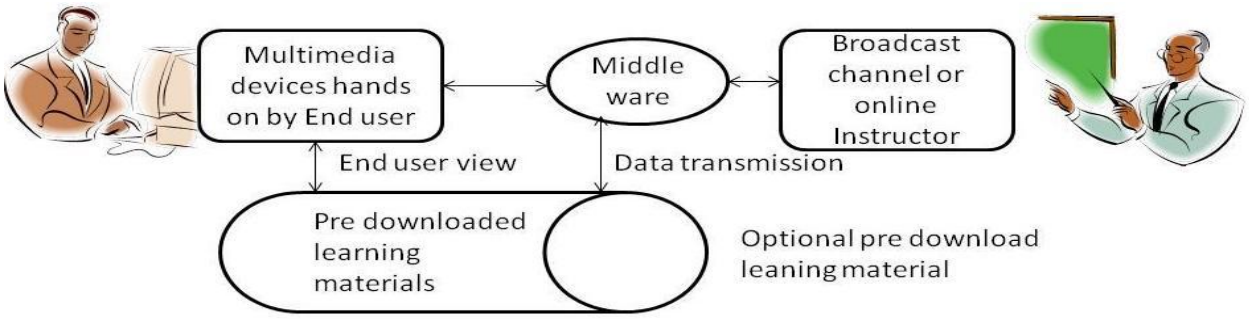

Fig1. Leaning through Multimedia

5. PROPOSED CONCEPT

Here will also play a major role on the performance of strategic learning. Since, designing protocols which enable users to efficiently gather from the network [1]. This paper is intended to survey and discuss existing approaches on extracting multimedia semantics in a statistical learning framework. Our goal is to present the current challenges and solutions from a few different perspectives and cover a sample of related work [2]. The complexity of today’s global society and the accelerating rate of change require a citizenry that continuously learns computes, thinks, creates,

and innovates. That translates into a critical need to become extremely efficient in the use of the time we spend learning, since we are being required to continuously learn throughout our lives [3]. If studies provide a necessary method of instruction in a multimedia condition and do not provide an equivalent form of the method in a compared instructional treatment, the results will appear to favor multimedia when in fact, the method influenced the learning. The key issue here is whether any instructional method can be presented in more than one medium [5]. More seriously, periodically sending random bits along the network for bandwidth testing purpose when no real data transmission is actually required can be a significant waste of total bandwidth of networks. We propose a model to qualify the benefit and loss of bandwidth estimation spending and use it to achieve an optimal proportion of bandwidth testing [7]. Hardly had we used multimedia devices to learn because the issues two issues which is low bandwidth and active teaching skills. There are varying ways of presenting learning material in a multimedia format to students [9]. More efforts are needed to create new programs using multimedia elements and multimedia authoring tools to fulfill a content-rich learning software and courseware to different students. By multimedia, here we don't mean only animation, or image and video related products. Those maybe incorporated with programming and other methods to provide a portal, an application, etc. in which data, video, and images are mixed [10].

4.1. Increasing the bandwidth for broad casting.

In this case we analysis the bandwidth for uploading and downloading the teaching material s and live broadcasting. There are many chances is possible to loss of bandwidth during transmission on live broadcasting in learning. Most of experienced researchers recognize that the use of technology and multimedia, resources, and lessons can vary in the level of interactivity, modality, sequencing, pacing, guidance, prompts, and alignment to student interest, all of which influence the efficiency in learning [3]. Media object transmission time limit by actively monitoring the available bandwidth of the network and adapting the object to a target size that can be transmitted within a given time limit [7]. As a result, it is becoming increasingly clear that traditional textbooks will be cast aside and the adoption of the e-book will result [9].

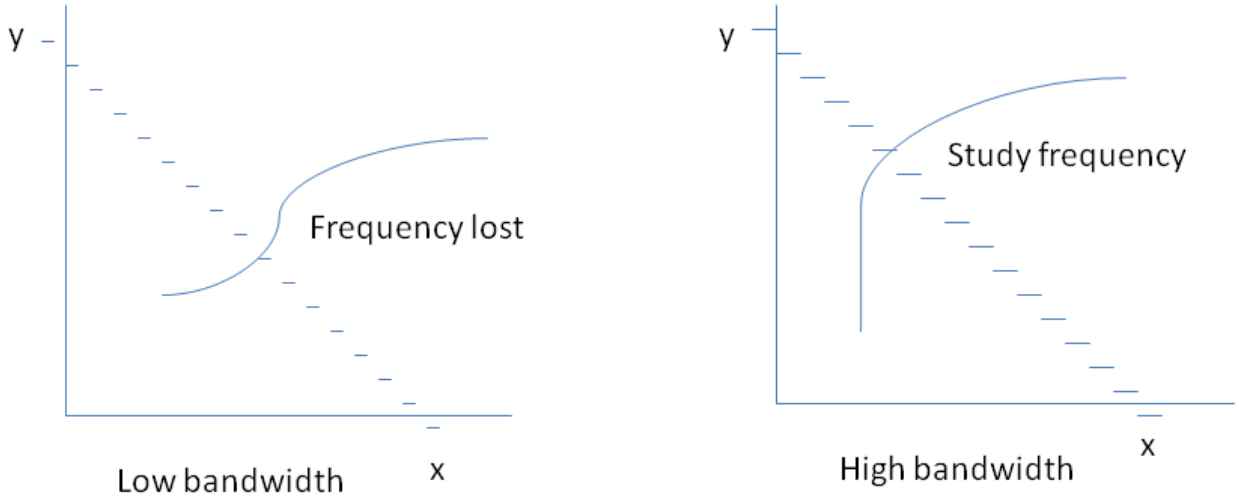

Fig2. View in high and low bandwidth.

4.2. Active teaching skills.

In this case the class room instruction are more efficient than multimedia, the instructor sometimes has more than multimedia devices. Informed educators understand that the optimum design depends on the content, context, and the learner. The real challenge before educators today, is to establish learning environments, teaching practices, curricula, and resources that leverage what we now know about the limitations of human physiology and the capacity explained by the cognitive sciences to augment deep learning in students [3]. The learning benefits due to multimedia alone have not been found and cannot be claimed; their comprehensive analysis concluded that a very weak learning advantage for multimedia in empirical studies was attributable to uncontrolled instructional methods [5]. In a review by various researchers of studies that have investigated the effectiveness of multimedia in learning suggested that the people who used computer-based multimedia instruction performed better in terms of

test scores, compared to those who received instruction through traditional classroom lectures [10].

4.3. Video Loss Velocity.

In this case we measure the video loss, the velocity has design for carried the video protocols and packets. In this method we define the high definition quality how it produce the output. Video velocity is advanced yet simple to use and it is purpose built for long term, set-it & forget-it capture scenarios. While transposing from any input format into H.264 or other. The motion-detection based recording also works on video files. Video velocity comes with a build in scheduler to auto start recording at any time of day and it will make sure it's running at all times and reliably recording your work [11]. A camera observing persons teaching or leaning may require higher frame rates than a person walking in the class room. The video velocity of the subject is also a consideration [12] for the part of broadcasting.

4.4. Video frequency ranger.

The frequency of a signal conveying the image and synchro nizing pulses in a television broadcastingsystem. It lies in th e range from about 50 hertz to 8 megahertz [13]. Amount of RAM and disk space depends on the capture resolution and frequency [11].It works between the ranges of signal to avoid the collision in transmission to view the clear picture.

4.5. Loss identity.

What defines here is total loss of your identity; it has loss total information about the video transmission, in terms of information technology the loss identity has determines such dependency on external validation prevents, those validation get approve from the other side to connect. In this case loss of identity mentioned here lost of username password, pin and etc.

4.6. Image loss identification.

The risk for image loss identification and analysis is bad sequence of transmission from trainer to learner. It is simply measure of deviation from the expected. Image recognizes its responsibility to manage in responsible manner, which is identifying and addressing the risk. We consider no loss or interruption of services to be acceptable [14]. Therefore we also consider clear view and bad view of images from trainer to learner.

4.7. Control - video quality.

To control video quality to get more clear view output it depends on the transmission bandwidth, however if the bandwidth loss so we can find the interruption on output video quality. We need to set the efficient network and high quality bandwidth for to get good video quality. There will always be multiple users transmitting across the network that might overload the network [15].

4.8. Co-ordination coverage for audio and video.

We found that simply using a human voice without the image of an agent was sufficient to induce learners to use social rules when interacting with a computer [5].In this case audio is including speech, background noise and sound effects also video includes moving pictures, animation and graphics [9]. Multimedia technology has the potential and functionality to hold enjoyment for users compared to that of a standard textbook. As far as we consider both audio and video must transmit same set of sequence in case of anything lost, we may hear audio early or later than video sequence, so we must produce the output in same manner to understand the viewer. In Transmission bandwidth is so important to give better output in case of low bandwidth we cannot hear or view the exact output.

5. CONCLUSION

However, studying this knowledge scenario is essential for achieving new performance bounds as well as new, improved, operational solutions for informational-decentralized multimedia learning systems [1]. The results of these studies suggest that multimedia is most effective for people with low prior knowledge or aptitude in the domain being learned [4]. Educators are continuously redesigning learning experiences in order to increase and deepen learning for all students, as evidenced by the recent literature on differentiated learning. Their efforts are much more likely to succeed when their work is informed by the latest research from the cognitive sciences and research on multimedia designs for learning. There continues to be opportunities to ask more specific research questions related to multimedia learning through high-tech media [3]. Different multimedia issues and suggested that the evidence in all of them pointed to “no differences” as the most reasonable conclusion [5]. E-learning should not be a replacement to the traditional learning, but an improvement to the efficiency of learning process [10]. The proposed solution provides secure inner product computation, and significantly improves it to achieve privacy requirements in two levels of models. Thorough analysis investigating privacy and efficiency guarantees of proposed schemes is given, and experiments on the real-world dataset show our proposed schemes introduce low overhead on both computation and communication.

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