Communication Information Technology: Academic Role & Responsibilities

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Abstract

The growth of an academic system which meets the ideas efficiently stances many tests, high development in teaching is cumulative the request for flexible and groundbreaking methods to knowledge in which information technology can play a vital role. In an instructive organization “education” and “knowledge” are the two major happenings besides “valuation” which is a managing action. The Communication Information Technology (CIT) has a possibility to convert the dissimilar areas of the educational system. In this paper our focus is on find the tasks dominant in our instructive organization and suggesting the role of Communication Information Technology in its successful application. This paper also delivers some references which could be used as a substance for raise of communication information technology facilities in academic organizations.

1.0 Introduction

Although information technology is not a solution for all of the deficits related with our instructive system, it proposes the possibility not only for meaningful attractive knowledge for all learners, but also for altering the way we learn [4]. In an instructive system eventually two important activities are carried out in the form of education and knowledge. These doings involve enormous resources of both state as well as public with the final objective of real deliverance. The role of the valuation system in the setting is to co-ordinate the education and knowledge activities and assesses the system performance. The conservative system of teaching particularly its valuation system is much stressed and has almost limited its operative to the conduct of inspections and statement of results. This has meaningfully pretentious the presentation of the whole system. Currently it is found that the role of CIT in the instructive sector is mostly limited to release of facilities also few more doings whereas the challenges are manifold although the advances in communication technologies have the potential to enhance lifelong learning [2].

The main objectives of an educational system; however its functional domain also includes services which it has to offer to its constituent elements. Therefore broadly speaking the following are the activities in an educational system:

a) Teaching
b) Learning
c) Assessment and
d) Other Services

These technologies can be used to address the changing demands within the sector:

• for more flexible learning;
• for extension of educational services to national and international markets; and
• for more cost-effective delivery of education and related services in an increasingly competitive environment.

2.0 Challenges within Academic Setup

The four dissimilar areas of doings recognized above are in state of great dynamics and the conservative organization is powerless to cope up the contests linked with new chances and changes. Some of the main tests in each of the doings of an instructive scheme are as follows:

2.1 Education: The Challenges with the education include:

2.1.1 To plan the address in a highly efficient manner such that both educator and learner sharing become obligatory.
2.1.2 To provide an appropriate environment for efficient alteration and distribution of vital information
2.1.3 To inspire the student community with the concept of “acquire by responsibility.”
2.1.4 Making the most of the aptitudes of the pupils, regardless of their physical and mental infirmities.

2.2 Knowledge: The knowledge situation is also in state of extreme dynamics and some of the main tests associated with it are as under:
2.2.1 Providing material and knowledge anywhere, anytime, anyway and anyhow.
2.2.2 Allow more supplie access to teaching plummeting barriers of time and place of study.
2.2.3 Obtain new skills in a way that is convincing and attractive.
2.2.4 Contribute in networked and face-to-face communities of learners composed of teachers, mentors, domain experts, and “cognitive” teachers that together approach the efficiency of a one-on-one human tutor.
2.2.5 Using imitation for problem solving methods.
2.2.6 Blockade of languages is made irrelevant.

2.3 Valuation: The release of any teaching scheme is largely reliant on its scheme of examination (assessment). The growth of an evaluation system which meets its major objectives of achieving anticipated cogency and dependability is a real test at global level. Some of the challenges in an assessment system are:
2.3.1 Constant Assessment Process
2.3.2 Plan the Assessment System in such a way to achieve the wanted Validity, Reliability and Transparency.
2.3.3 Obtain continuous and meaningful feedback of assessment.
2.3.4 Make it complete enough to explore the potential of the candidates.
2.3.5 Make it healthy enough to grow higher order skills of comprehension in pupils.
2.3.6 Make it a student friendly exercise for every topic covered.
2.3.7 Develop it as an integral part of the education system to co-ordinate the teaching & learning process.
2.3.8 Design it in such a way which forces comprehensive reading.

2.4 Other Services: The release of services has been a vital component of an educational system. In order to make the system well-organized in all compasses the facilities have to be provided to all its users. Following are some of the main challenges in services:
2.4.1 Tap into ironic, commonly available digital libraries with books, trainings, material, and data sets.
2.4.2 Dynamic management and its record and exchange information
2.4.3 Develop information systems which provision all the users of the system for their necessities.
2.4.4 Provide facilities which ensure delivery of info anytime and anywhere at affordable costs.

3.0 Scope for CIT

The progression in the computer programming has reached an equal wherein sponsored up by the huge databases artificial intelligence is combined in the systems. The Investigation test is to deliver knowledge surroundings that method the physiognomies as listed above. Such schemes, correctly used, can harvest a meaningfully better-educated public by combining advances in learning sciences for human resource growth with advances in information technology [6]. The task of emerging the wanted system involves a number of technical challenges in the following separate, but interrelated, areas:

3.1 Simulation-based teaching

Software has assumed great meaning in education and knowledge. It has a marvelous scope for both educations as well knowledge even in the most multifaceted systems. An significant genre for next-generation instructive software, chiefly for training scientists, mathematicians, engineers, and technologists, is what might be called a clip perfect. By
loose similarity to the well known colonnades of copy-and-paste 2-D clip art, a clip perfect is an interactive micro-world, characteristically simulation- or rule-based, that couriers both geometry and conduct of the modeled entity or concept. It is an independent object ready to be embedded in a context such as a hypermedia learning module. First, they are intended to be joint to form larger models, for example, a emotion model may be linked to a vascular system model and to a lung model to create a composite model that fakes respiration and oxygenation of the blood as it is distributed throughout the body. Second, no single model does for all learning purposes. Perhaps lots, if not hundreds, of heart models are needed to meet the needs of learners at different levels of understanding and with different kinds of backgrounds and learning styles.

3.2 Online Assessment System Perspective Analysis

It has been experiential that nearly all the areas of the valuation system require main reforms to make it as an effective part of the instructive system. The Communication Information Technology has a marvelous possibility for use in many processes in an Inspection System besides the gathering of results and other student based services. In fact most of the governments have previously switched over to electronic system of gathering of results and even Management Information system supporting the Management in running the system efficiently are already available. One of the essential components of the teaching learning process is encouraging and creating the system of self studies among the students. In this context teachers have been traditionally giving assignments to the students and it serves the purpose only once each student is given a different assignment and measured once it is submitted. With the increase in the number of students, assigning different projects to students and then assessing each of them is an issue. This component of the scheme requires to be modernized by the support of the technology. In this regard we propose that the development of an E-assignment system which shall assign different assignment to each of the student and assess them automatically for their assignment on some other scheduled day without adding any additional burden to the teacher.

Similarly pupils related information system providing pertinent information to the students also exists in Establishments but these provision systems do not strengthen the basic project issues and the objectives of the assessment system. In our opinion support solutions are required to be industrialized for all key entities (teachers, students, examination body) involved in the system. Similarly doings like question paper setting, evaluation, conduct of exam etc require to be supported by the technology to ensure development of quality assessment system.

3.3 Reasoning tutors

The growth of a faultless human teacher involves important resources in terms of both time as well as wealth. The growth of a machine based teacher with the current level of computer programming has become realism - the possibility for. It has been experiential that it is likely for an automatic tutor to advance pupil performance by roughly one standard deviation from the mean for some high school mathematics students. The knowledge representations that underline such tutors should also be designed to incorporate new knowledge about a subject area, as well as advances in knowledge and techniques associated with both pedagogy and assessment.

This is a affected result, one aim that such teachers are not widely obtainable is because important human effort is required to grow the specialized knowledge base for each different topic. In adding, we do not comprehend fully the circumstances under which such a tutor will be real. Significant development must be made in crafting information pictures that are both interoperable and reusable. We need to develop models of the various styles in which a student learns, as well as appropriate pedagogies and assessment techniques.

3.4 Knowledge-On the Fly

It is grave that each separate learner be able to learn in the bodily, social, national, and virtual setting most suitable to that learner. In adding, the beginner may have a much absorbed objective for a specific learning session. On the Fly knowledge over such a comprehensive range of settings presents a amount of practical challenges, including the support of reliable and ubiquitous computing, access and control of distant instruments, flexible digital thing sharing, and user interfaces for small-format mobile plans. The automatic teacher must tailor brought information to fit that setting and the goals of the just-in- time learner.

5.0 Conclusion

The teaching plays an important part within civilization in the procedure of public change and so the board in the civilizations has altered to a form system of teaching. Education providers are increasingly investing in innovative and sophisticated marketing. The use of communications and information technologies in education development and delivery is vital if our educational institutions are to achieve competitive success in the international market for higher and professional education. Our dream of educators and beginners engrossed in a net of rich knowledge substances that are repeatedly augmented and improved by the members is attainable through expected advances in information
technology and learning sciences. As a consequence of these labors, we determination be earlier to attaining such areas as having distorted the republic into a knowledge society. These new welfares will be facilitated by regular advances in semiconductor and magnetic storage, as well as in electronic and optical communications. The global teaching and exercise market is a extremely competitive industry.

References