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BENEFITS OF ICT IN CLASSROOM

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ABSTRACT

Today, most of the schools have smart classes, a complete technology based classroom that has revolutionized teaching and learning of subjects like Science and Social Science elements. Incorporating ICT boards into the classrooms have made learning fun as the students are able to use their kinaesthetic skills to drag and drop items where they belong. ICT allowed learning to make interactive and engaging for the students. Digital labs in various subjects are very popular in teaching-learning process. It fosters individualized and peer learning. Teachers can easily explain and demonstrate many theoretical concepts making it more comprehensive for students. The use of ICT in schools and colleges has not only become a bound of quality education but has also helped in bridging the gap between students and access like quality education. This generation has always been open to the elements to gadgets and latest technology. Hence it only makes sense to teach them the way they desire to learn.

KEYWORDS revolutionized, incorporating, engaging and comprehensive

INTRODUCTION

In the technological century students actively learn by observing and performing activities, the process of learning is far more accelerated when a practical implementation is associated and the learner is benefited with the applied knowledge and skills, it also involves trial and error at times during self-exploration. It's more effective if the students are allowed to perform rather just asked to remember some information. The functional and implied knowledge should be the ultimate goal of the education system. A typical classroom environment with a presentation from the course teacher accompanied by a lecture does not promote learners to participate and build a required involvement level of the students. Most of the learners just copy the notes from lecture or board considering. It is a part of their responsibility in the class but does not build their engagement level with the course being taught. This typical environment only promotes a fraction of students who start thinking at their own and try to raise questions taking initiatives. The students have a minimum role to play here and the just at the receiving end of the transmission.

GOVERNMENT INITIATIVES

Government has always shown a lot of interest in use of ICT in education. It sees ICT as a great enabler in education that can bridge the gap between urban and rural education sectors and help in tackling the issue of access and quality in India. Consequently, the government has been taken many initiatives to improve IT infrastructure and promote use of ICT in education. The National Curriculum Framework 2005 (NCF 2005) highlights the importance of ICT in school education. It states that judicious use of multimedia and ICT can increase the reach of educational programmes, facilitate management of the system, as well as to help and address specific learning needs and requirements of young learners, teachers and teacher educators. Possibilities of teaching and learning at varied places, self-learning, dual modes of study, etc. could all benefit from the use of technology, particularly ICT.

The scheme, Information and Communication Technology in Schools was also launched in 2004 to provide opportunities to secondary stage students to develop ICT skills and to promote ICT aided learning process. The scheme is a major catalyst to bridge the digital split amongst students of various socio-economic and other geographical barriers. The Central Board of Secondary Education has adopted Continuous and Comprehensive Evaluation, an education system that aims to move away from the traditional chalk and talk method of teaching.

DRIVERS FOR ICT INITIATIVES IN LEARNING AND TEACHING

The main approaches to ICT developments in learning and teaching were apparent. Purely subject-level initiatives had been driven by the interest of individual staff and their faith that this mode of delivery enhanced the learning experience. In addition to this, in some subject areas there had been perceived external requirements, such as professional or vocational changes. These individually inspired initiatives had received varying degrees of support at institutional level. ICT developments had been driven by an institutional strategy that stressed the role of ICT in relation to a broader strategic aim, such as widening participation, student retention, employability or student-centred learning.

KEYS TO SUCCESSFUL IMPLEMENTATION

A number of factors were seen to be significant in the successful implementation of an ICT strategy for learning and teaching. Notable amongst these was the appointment of key, staff to act as champions of the initiative. These staff appeared to work particularly effectively at faculty level. The choice of technical platform was vital to success, a system perceived as complex or difficult to access presented a significant barrier to many staff. At least equally important was the existence of a supportive and responsive technical and teaching and learning unit, able to respond to the needs of individual staff in uploading their materials on to the system.

INVESTMENT IN THE INFRASTRUCTURE

There had been considerable investment in the infrastructure for students use. In the school educational and higher educational institutions, students were generally satisfied with their access to computers, since there were significant facilities available for open access. Students were less satisfied, since they needed, to some extent at least, to access computers in rooms used for teaching. The integration of ICT into learning and teaching also raised the question of the incentive for staff to engage in such developments, depending upon the relative priority accorded to teaching and research in the institution.

CHARACTERISTICS AND IMPACT OF ICT INITIATIVES

Virtual learning environments

The use of ICT was varied across the institution and the subject initiatives where made substantial use of a web-based virtual learning environment, this had clearly been a positive influence on the extent and nature of the ICT developments. A virtual learning environment seemed to encourage a more mixed range of learning and communication activities within the subject areas for

science and social science, as well as a more interactive use of the technology.

Staff choice
Academic staff had considerable choice and indeed if, they wished to develop ICT as part of their teaching. This was a realistic approach and one that was appreciated by individual lecturers. The more striving teaching of courses through ICT was evident in some of the institutions with a virtual learning environment, where students were given simultaneous access to different information and resources and the opportunity to use the technology to deploy these in relation to their particular learning needs.

Pedagogy, not technology
The extent and erudition of the initiatives, there were clear messages arising from the different experiences. Across the different subjects and institutions, there was a strong perception amongst those who were leading successful ICT initiatives that developments needed to be driven by pedagogy, not the technology.

Flexibility
This was one of the characteristics of ICT based approaches that was most valued by students and teachers. The provision of electronic learning materials enables students to work at their own place, in their own time and chosen location. The flexibility was important in allowing students to plan or manage their own learning. It seemed to take on an added dimension in those institutions with a more diverse recruitment profile, for example as a result of a particular commitment to widening participation, employability or disability.

Interactivity
The interactive nature of ICT was identified recent days as a valued aid to learning, although this facility had yet to be fully exploited. Students appreciated the active participation, whether in exercises or the manipulation of material on screen.

MONITORING PROGRESS FOR STUDENTS
Lecturing staff were quite clear is using ICT approaches in the learning and teaching process was not an easy option, nor did it reduce their workload. However, it has led to shifts in the balance of the methods and activities they deployed. The facility, with virtual learning environments, to monitor student online activity, by group and individually, had enabled staff to intervene and advise individual students or introduce extra support, through teaching sessions for the group. The perception of some lecturers was that they were spending more time in contact with individual students, usually through e- communication. Tutorials, whether online or face-to-face, had become more important and they were seen as more effective, because the online monitoring leads to more careful preparation and a more focused agenda.

TEACHING IMPROVEMENTS
The most often cited improvement was in the level and quality of preparation, usually linked to the fact that they had produced a set of high quality materials. Once prepared, the materials could be easily updated and revised to suit the needs of different courses or student groups. Lectures and other presentations were felt to have been more dynamic and varied, whether through the simple use of presentational software or a multimedia web-linked event. The posting of lecture notes for students to read in advance, had, in the view of at least six of the staff interviewed, given them freedom to concentrate on important concepts or issues within the content.

USE ICT IN EFFECTIVELY LEARNING
A number of difficulties and issues that have significance beyond the individual subject initiatives, While there was evidence that students need to be taught how to take proper advantage of ICT approaches to learning, it was only clear that the matter was being addressed formally in three universities. Similarly, to make full and effective use of ICT, whether for learning or communication, students need to be taught appropriate rules, responsibilities and protocols. Again, there was little evidence that this was being attended to across the universities in the sample.

USE OF ICT TO ENHANCE LEARNING
Learning in classrooms is mediated by tools and artefacts. These include books, film, objects, language and people. In the twenty-first century, ICT has an especially prominent, and growing, role of transforming learning and children's services, the use of digital and interactive technologies to achieve a more personalised approach to education and children's services. ICT is not essentially good or bad, but depends for its value on the ways it is used. Quality learning requires attention to be paid to the relationships between the use of new technologies and subject matter, the nature of the learner and approaches to teaching and assessment. When students are ostensibly studying the subject of the lesson, they are not always following the intended learning. ICT can be used to help learning; it cannot do so on its own. We disagree with the view that students can guide themselves from informal to structured knowledge. Instead, a teacher is needed to help make the connections, however much computer power is available. Without the support of a teacher, students are unlikely to develop knowledge of mathematical proof from their everyday reasoning.

CONCLUSION
The use of ICT in teaching and learning helps students to expand knowledge, experience and increase understanding, especially in the Science subjects that require visual, audio, flow chart, video presentation and so on. Using ICT in lesson has positive impact on students' achievements. Schools must strive to increase usage of ICT amongst teachers. On the other hand, teachers should put more effort to use ICT in their lesson in order to increase students' achievements. Teachers who are weak in the use of ICT need to participate in ICT training courses. ICT facilities provided by the government in schools must be fully utilised by the teachers.

REFERENCES
1. Das, R & Das, N (2014). "Digitalized Teaching-Learning Environment through ICTs: Its Challenges and Government Initiatives on ICT in India". International Multidisciplinary Research Journal,1(4).
2. David, Lewis & Ruth, Goodison (2004). Enhancing learning with Information and Communication Technology (ICT) in Higher Education, Sherwood Park Annesley, Nottingham: DfES Publications.
3. Ian Diamond (2008). Improving teaching and learning in schools, London: TLRP Institute of Education London University.
4. Jeanfolkees and Stephen lacy. (2004). The media in your life, New Delhi: Moss communication publication
5. Verma, R & Sharma, S (2005).Modern trends in teaching technology, New Delhi: Anmol publications.
6. Ziden, A.A, Ismail, I, Spian, R & Kumutha, K (2011). "The Effects of ICT Use in Teaching and Learning on Students' Achievement in Science Subject in a Primary School in Malaysia", Malaysia Journal of Distance Education, 13(2), 19-32.