

ENTAIL OF THE ICTIN EDUCATION

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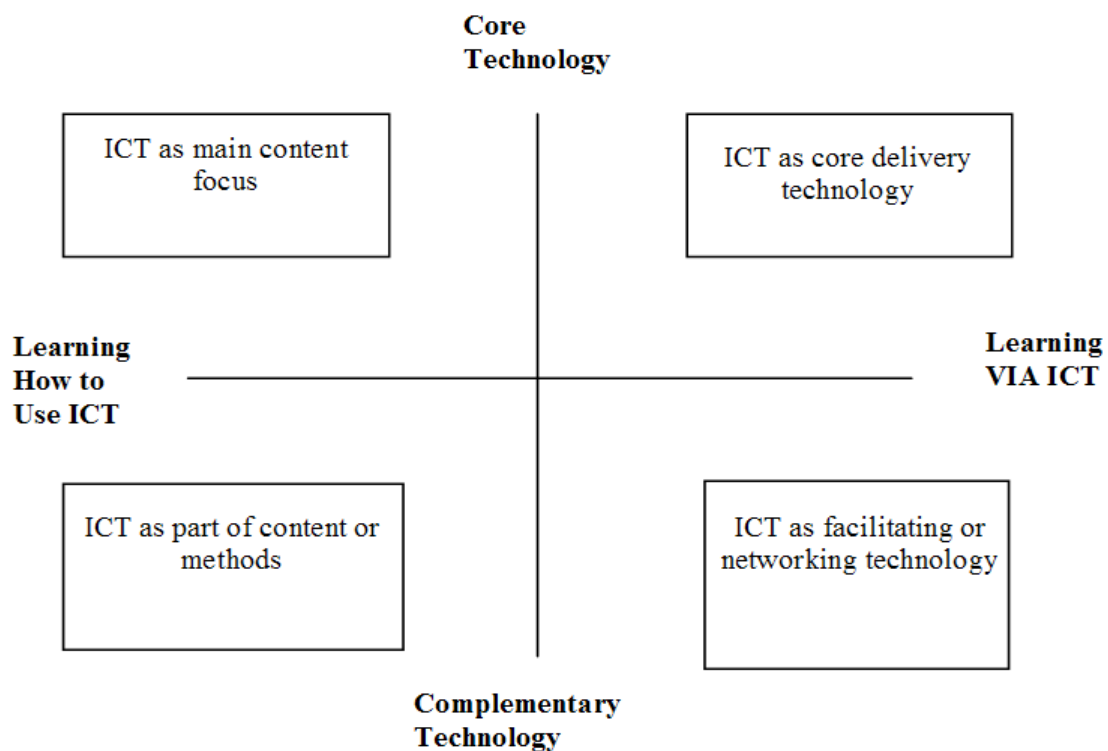
Introduction:

The student population in higher education is changing. The dynamic state of technological development has made perpetual (or lifelong) learning a necessity. For this reason, more and more adults are returning to school to learn new skills or expand the skills they already have.

According to a recent article in The New York Times, the increasing number of adults returning to school is the result of "demands on companies, in an intensely competitive global economy, to keep improving productivity." Everhart believes that this dramatic increase in the student population may force most educational institutions to deliver at least half of all instruction online. Offering traditional on-campus courses to a burgeoning student population would require doubling the number of campuses, classrooms, and professors. This would lead to excessive costs and a critical shortage of instructional personnel. Further Chambers insists that properly designed and implemented online courses "provide faster learning, at lower costs, with more accountability, thereby enabling both companies and schools to keep up with [rapid] changes in the global economy." Both Everhart and Chambers agree that

educational institutions cannot ignore the move to online instruction if they hope to attract and keep students in the future.

ICT experts and educationist expects that in the future all classrooms will have multimedia delivery access available to allow students and instructors access to the Internet. This access will make it possible for the virtual and physical classrooms to mesh to create an alternative course format of "connected learning" that will combine the best of both worlds. The changing modes of instructional delivery will demand that courses be designed to provide for greater student-student and student-teacher **interactivity**. As more and more courses move from the physical F2F classroom to the "connected" or virtual classroom, students will need to assume more responsibility for their own learning. They will need to become independent learners, able to think and figure things out for themselves.



Categories for ICT in teacher training (adapted from Collis & Jung, 2003, p.176)

According to research reports half of the students believed that information technology improved the courses that they were taking while most preferred a ‘moderate’ level of IT usage in their courses. There appeared here possibly to be a concern about ‘excessive’ use of information technology, though the study did not explore this area further.

The use of information technology by students in their daily lives is increasing and while many instructors are using IT effectively in their courses, it appears that many are not, revealing significant opportunity for improvement.

Categorization of information technology tools for education:

The information technology based tools that can be used for education are expanding daily. The following chart illustrates the technologies available:

AcademicYear	Ways in which ICT tools were used
1998/99	Course notes/tutorial exercises available on website. Students expected to prepare for classroom sessions and to use e-mail to communicate with the tutor.
1999/00	Web pages supplemented by interactive tutorials on CD, on-line tests for formative purposes and asynchronous discussion board.
2000/01	Coursework for the first time explicitly linked to the

	interactive tutorials. FAQtool introduced. To support coursework.
2001/02	Module materials and communications packaged in the VLE Blackboard. Use of asynchronous discussion boards linked to coursework and also directly assessed.

ICT: changes the continuing training:

Recently the role of higher education institutions in the area of training of employees is limited. The increasing use of ICT could mean a change in this respect. The potential changes because of ICT depend on the extent to which:

- ICT (is)/(will be) used as a training tool for training of employees. If the role of ICT is limited, than expected changes in the structure of the market because of this will be limited;
- ICT as a training tool can be considered as additional training in the sense that ICT helps to organize training institutions where otherwise no training would have taken place. Points 1 and 2 together determine to what extent the market of training of employees grows as a whole because of the use of ICT as a training tool.
- The use of ICT could improve the relative position of higher education institutions in this market. The potential changes for higher education institutions because of ICT will be higher, the more important this training tool turns out to be, the more this will lead to

additional training and the more this will change their market position compared to other suppliers.

The importance of ICT as a training tool:

In the Netherlands NIDAP organizes a yearly survey on continuing training among approximately 800 companies with at least 50 employees. For the survey over 1999, we made use of the possibility to add a number of questions to this survey about their use of ICT-based training. The outcomes of the survey lead to the following estimates for the quantitative use of ICT-based training of the employed.

Table : Estimates for some indicators for reach of ICT as a training tool in the Netherlands (1999)	
Proportion of larger companies (>50) using ICT as a training tool	32%
Proportion of larger companies (>50) using a CBT as a training tool	23%
Number of employees trained through ICT (including extrapolated figures for smaller companies)	300.000
Participants in training through ICT as a proportion of all trained employees	12%

The following table presents the utilization of the web in the organization of teaching:

Use made of the web	(%) of response
Information on course homepages	70%
Submitting assignments to teacher	50%
Course administration applications	60%
Monitoring points for partial completion	50%
Giving feedback for improvement of course or teaching	30%
Distribution channel for course material	70%

Benefits/Advantages of ICT in Education:

Here are some of the benefits which ICT brings to education according to recent research findings.

- Greater efficiency throughout the school.
- Communication channels are increased through email, discussion groups and chat rooms
- Regular use of ICT across different curriculum subjects can have a beneficial motivational influence on students' learning.
- ICT facilitates sharing of resources, expertise and advice
- Greater flexibility in when and where tasks are carried out

vary considerably. Some see it as a potential tool to aid learning whereas others seem to disagree with the use of technology in early year settings. Blatchford and Whitebread (2003:16), suggests that the use of ICT in the foundation stage is “unhealthy and hinders learning”. Other early years educators who are opposed to offering ICT experiences within the educational settings take a less extreme view than this and suggest that ICT is fine, but there are other more vital experiences that young children will benefit from, (Blatchford and Whitebread, 2003). In theory some people may have the opinion that the teachers who had not experienced ICT throughout their learning tend to have a negative attitude towards it, as they may lack the training in that area of the curriculum.

Another important drawback to using ICT in schools is the fact that computers are expensive. According to the IT learning exchange (2001), in most schools ICT will be the single largest curriculum budget cost. This may be seen as a good thing but on the other hand there will be little money left over for other significant costs

Recommendations:

- The teachers should increase the use of ICT for content transaction, preparation of the teaching-learning materials, academic planning, project work and making presentations as these are the components directly related to the teaching-learning process, rather than using it for maintaining records, examination purpose and downloading information. For the fulfillment of this objective, training programmes need to be conducted on a large scale.

- The management should encourage and support the schools to develop language laboratory and use it for the teaching of languages.
- The management should motivate teachers to use ICT for the teaching-learning process by providing the incentives and framing the policies at the institute.
- Govt. and other ICT companies should collaborate with Teacher Education colleges to provide training to in-service teachers for using ICT in teaching-learning process.
- Number of teachers attending workshops and seminars on “the Use of ICT in the teaching-learning process” should increase. Individual and institutions should utilize such opportunities to the maximum.
- Schools should prepare a schedule for a regular access to computers by students for preparing projects and assignments.
- Teachers should not restrict their knowledge and expertise of using computers for their own professional growth and development but should plan out activities for contributing to the growth and development of the institution.

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