Clarification to the Teachers of Technical Institutions for Managing Next Generation Classrooms

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Abstract – Since tomorrow's student would be Techno-savy, equipped with skills to function effectively on the web world, the teacher should be given appropriate training for the development skills needed for facing the challenges, opportunities and to meet the demands of the lifelong learning. It is in the pre-service teacher – training program that teachers need to be groomed in terms of skills needed and favorable attitudes towards integration of Technology Component in the teaching learning process. Development in teaching has revealed considerable problems both in the measurement of progress and in the qualification of the students. We have to consider not only the examinations in detail but also to note their effect on teaching, thus remaining the importance of examinations, subjects and approach to language teaching.

SOLUTIONS TO THE PROBLEMS

1. Suggestions to improve curriculum

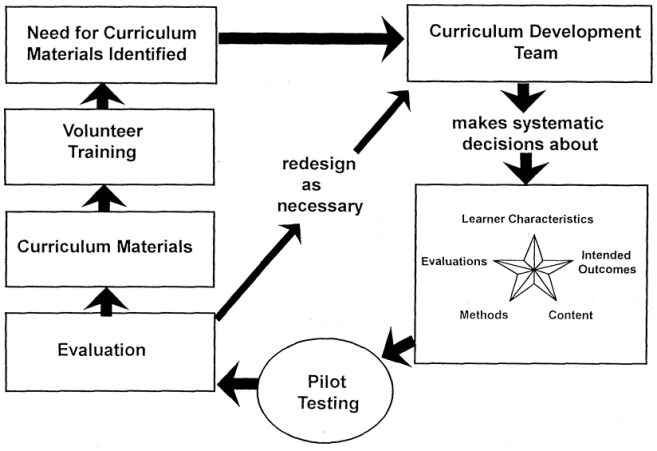

Fig:1 Curriculum Development

The objective is not to prepare technocrats but techno-pedagogy, wherein teachers are in a position to integrate technology into teaching learning as well as to develop art and skill of webogogy (i.e. to make use of internet technology, exploring it, accessing information from it to use in teaching learning etc.). So, objectives must be set at skill level. Professional development of teacher needs to be given importance. A teacher has to develop knowledge regarding location of proper sites, new software and hardware entering the field and their use in teaching learning, development of proper pedagogy regarding their content matter by continuous upgradation of content knowledge etc.

There must to be consequence between academic curriculum and teacher training curriculum so that a teacher can utilize the knowledge of students in designing teaching learning processes, project works and assignments. Proper care should be taken to provide more practical approach to the curriculum.Approaches to ICT education need to concentrate on providing techno-pedagogy aspect.

2. Developing Learning Resources

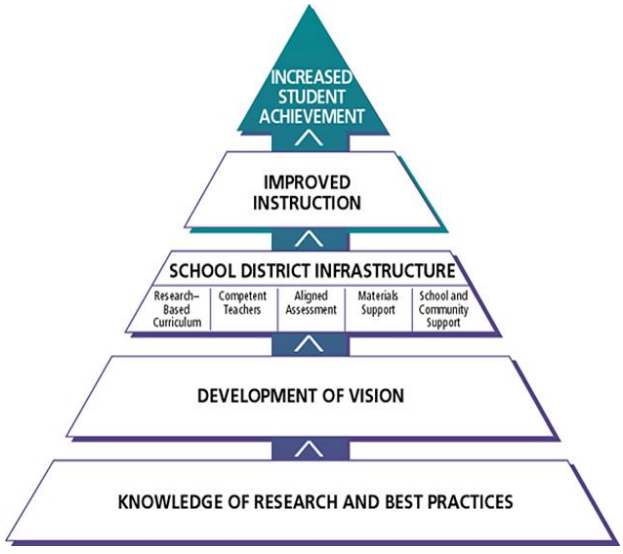

Fig:2 Developing Learning Resources

In addition to the packages being offered like M.S.Office, HTML etc. knowledge about web portals and multimedia software need to be provided as they are user-friendly in developing learning resources. Some integration approaches need to be undertaken to study. This will help student teachers to develop the concept of techno-pedagogy to a greater extent. Taking help of technically trained professionals (related with the field) will help in deciding on proper hardware and software

needed to develop learning resources easily, quickly and according to the requirement. Providing space for a person with necessary knowledge in maintenance of system in organization will provide a continuous availability of technology, up gradation at proper times, and possible quick help in times of crisis. The SSEC's Theory of Action advocates for scientifically based research and best practices to inform the development of a shared vision and infrastructure for transforming science education.

3.Activities to be given to the student – teacher

Searching information

Discussing pedagogical issues

Designing lesson plans

Creating digital works

Self / peer evaluation

Communication/Publishing

Teachers Professional Development

a) Need for Professional Development of Teachers

Professional development in teaching profession is more important since the professionals involved in this are engaged in preparing future generations. Many of the teachers do not show much interest in professional development. They are satisfied with what they have learnt at their graduation or post-graduation. They forget the fact that learning is a continuous process.

b) Need for Special Courses

Efforts are made by the government agencies to provide in-service refresher courses to facilitate professional development of the teachers. But many of the participants attend such programs half-heartedly. Only a few participants attend such programs with full attention and grow professionally. So the purpose of conducting such programs is not met adequately. This shows that until and unless a teacher intensely feels to become an effective teacher no program gives fruitful results.

c) Questions for Self-introspection

The language teachers in the technical institutions face delicate problems while dealing with Engineering students. To prevent this, they need to develop professionally and deliver quality services in education and they should be in a position to answer these questions positively. The following questions are framed for self-introspection. These questions address various dimension of professional development of teachers.

Do I have requisite knowledge of my subjects?

Am I updating my knowledge of my subjects?

Am I reading the subject journals and magazines?

Am I computer literate?

How best am I utilizing the computers?

Am I utilizing the resources available in the institution for the benefit of the students?

Need for Special Training

Student - teachers are required to submit a project, consisting of a collection of lesson plans and with the student's own evaluation of teaching. This consists of basic concepts, methods, and terminology. Since few of the colleges accept more students than usual, there is an increased teaching load for the remaining teachers. The working conditions are particularly frustrating due to certain reasons. Presentations based on English Teaching Forum articles are encouraged among the teachers. Experienced teachers are used as stepping stones for students' own reflection and independent research.

(a) Advantages for the students

Training offers the audience a variety of topics, activities, voices, and stimuli. It gives presenters the freedom of choice and the experience of appearing before a group. It gives many students, ideas for diploma projects and classroom teaching practice. It forces students to read and become "experts" in an area and prepares them for more serious library research. It increases student participation and teachers-students professional terminology. It is much more fun than a standard class.

(b) Advantages for the teachers

Offers a good opportunity for student observation such as grading, and the learning of new ideas.

Relieves the teacher from the burden of selection, preparation, and repetition of reading material.

Improves the pacing of a class (a change of activity every 15 minutes)

Helps to avoid the standard dangers with student presentations (students don't know where to look, how much to prepare, and how to present).

Generally Refreshing.

Five Components of a teacher development model

The five core elements are not isolated but are all connected: One builds on the other and all need to be considered as a whole. The five components are:

Providing different opportunities in curriculum for teachers to reflect through a range of different activities.

Building some ground rules to the process and into each activity to achieve Professional Development

Giving provision for the assessment of students.

Providing proper materials support.

Providing administrative and community support for low affective states.

Fig:3 Five Components of a teacher development model

Need for Digital Literacy

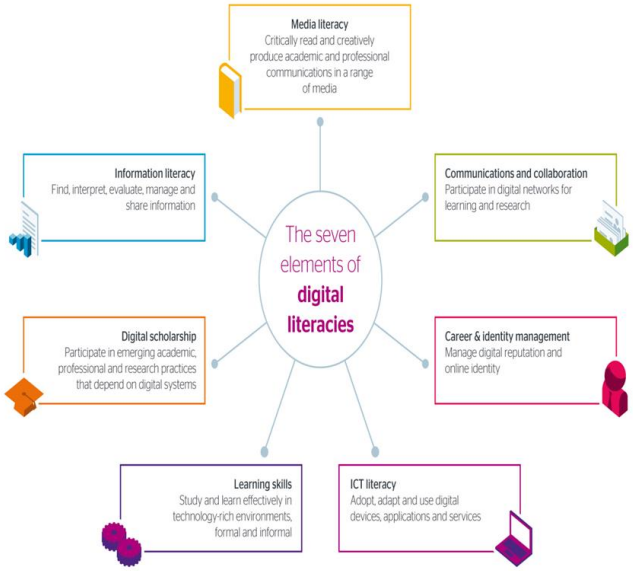

Fig:4 The Seven Elements of Digital Literacy

Digital literacy are those capabilities which fit an individual for living, learning and working in a digital society. Digital literacy looks beyond functional IT skills to describe a richer set of digital behaviors, practices and identities. What it means to be digitally literate changes over time and across contexts, so digital literacy is essentially a set of academic and professional situated practices supported by diverse and changing technologies. This definition quoted above can be used as a starting point to explore what key digital literacy is in a particular context eg university, college, service, department, subject area or professional environment.

Create your own materials. These can be based on the software.

Make schedules flexible enough as to accommodate individual or small group sessions with the computer.

Think of the combination of teacher-led classes and computer sessions that best suit your needs.

Design own computer oriented tasks for the development of language skills.

Direct students to the objectives you want them to achieve

Use Internet accessibility and create writing and speaking tasks for students using this computer resource.

World Wide Web contains millions of pages you can use to produce reading tasks.

Design reading tasks using any CD-ROM encyclopedia or program that contains hypertext.

Encourage your students to look for information in databases, which will make them think and use English.

Encourage them to use word processors and their applications such as spelling and grammar checkers.

Give a sense of purpose to your students. Ask them to write and send real e-mail and faxes: this will provide them with a real sense of communication.

Make use of web pages or CD interactive programs to generate discussions.

Teacher Self Analysis – Questionnaire

Any language teacher has to analyze himself to check his performance periodically by asking some questions to himself.

How clear are my directions?

What kinds of questions do I direct to students?

Do I give all students equal attention?

What is the distribution of student talk/teacher talk in class? How much student participation is there?

What kinds of verbal and non-verbal feedback do I give students? To whom do I direct these different types of feedback?

How often do students direct their comments to classmates, and how often do they direct them to the teacher?

How well do I use the backboard?

How well do I answer students' questions? Are my answers more complex than the questions require?

Is my pacing too fast or too slow for the majority of students in the class?

How well am I implementing the curriculum?

How well do I handle unanticipated classroom events?

Solution Through Technology - Technical Strategies

The use of CALL is rapidly expanding and teachers are finding themselves compelled to use computers often with minimal training or support. This pressure to use CALL can often lead to optimal use with some teachers, perfectly becoming lost in the CALL lab. A tendency can arise to rely too much on the technology and to think of the use of CALL, as a separate entity to that of the classroom. Different principles are applied to teaching in CALL labs than would be used in the classroom, resulting in activities better suited for self access than today's communicative classroom. Successful CALL is built on integration to the curriculum with proficient guidance from teachers that can provide many advantages for communicative teaching. Along with a theoretic underpinning, practical examples and ideas for using CALL in a communicative manner will be provided opening teachers to the wide potential of this powerful new medium to complement, rather than conflict, with their classroom teaching. Many teachers are reluctant to use the software the college has bought, because they have no experience of using information technology in front of their students. Common fears include the software going wrong, and a lack of confidence in teaching techniques, for lessons incorporating software. Every teacher must know practical classroom techniques for making English language teaching software programs a success. Then only the students enjoy popular programs and at different classroom set-ups, from the one-computer classroom to the multimedia lab. Students must learn to organize materials in order to become effective learners. An effective way to accomplish notebooks dedicated to their English class with separate sections for class notes, vocabulary, class assignments, homework, writing activities, and tests and quizzes. A monthly calendar should also be included in the notebook for assignment, homework, and testing schedules.

Language Teaching with Multimedia Tools

Now a days, as language teachers and trainers, we cannot ignore the definite need to reform our teaching strategies and methods. New pedagogical approaches to teaching languages include educational technologies not as a substitute to classroom teaching but as a complement to a more qualitative face to face teaching. Based on a series of recent and current experiments and research in the field of Educational Technology (E.T.), the researcher aims to show how Information Technology can serve the teaching of languages and of English in particular by offering a wide range of opportunities to practice the language in real life and cross-cultural settings. There are four objectives strongly rely on language teaching, which must be treated differently and taught with different methods.

(a) Language is unique

Language means having another look upon the world around us, seeing, living understanding and analyzing things differently. All students must be "operational" in at least one foreign language including English. The word operational can be defined by five landmarks:

To understand any native speaker regardless of accent

To know and understand the values and behaviors attached to a language/culture.

To be able to negotiate, convince an audience, solve problems and make decisions.

To master oral presentation skills (market studies, reports, etc.) and written skills (reports, articles, etc.).

To obtain a minimum score of 6.5 points on the TOEFL/IELTS scale.

It is a real necessity for us to take into account the entering level of the students and to create a system adapted to individual needs by giving responsibilities to the bilingual students and having specific objectives and intensive training for students who are below the threshold; but the new system must also be flexible in its development (depending on individual learning speed, motivation, performance, progress, etc.).

(b) The Role of Educational Technology

Educational Technology comes into place with a very specific aim to optimize language learning. Hence, Educational Technology can be perceived as a set of tools used for a pedagogy adapted to individual needs offering assets in four main directions: firstly, a diversification of teaching methods (diagnosis, follow up, tracking, assessment, etc.); secondly, an optimization of language training with tutoring and project management; thirdly, greater attention to communicative competence with contact hours between the teacher and the student, and finally, a more qualitative teaching and learning. To illustrate the potential enhancement of teaching methods, we will focus on the use of Internet in the classroom.

(c) Applications of Internet in Teaching

One first main application is the possibility for individual search with browsers before class. This kind of assignment gives an opportunity for the students to be active in their search and to fetch documents which they find interesting because they have selected them for a reason and because the web site of a university on the Internet is something dynamic and interactive with images, sounds and videos. This approach makes the assignment lively and gives that sense of realism which is our primary objective in the reform of language

teaching at Sathyabama University. A second application is in the use of Internet as a source of information in class to analyze the quality of a Web site, in a given sector and to elaborate a comparative grid To be successful, this application requires computer access for the students in the classroom and teacher guidance on specific sites.

The third range of applications of Internet in language teaching is the use of forums and other chat rooms for communication and exchange across the net. There are many other services along the same lines available on the Internet, which can contribute to the development of language practice outside the classroom, namely IRC, chat rooms or Listservs which allow students to engage in communication and interact in English with anyone connected and interested in a particular topic. Once given access to this medium, the students do not need assignments to communicate and write in English. They go and do it on their own, which is another good sign of active learning. But on-line educational technology is not only Internet and we also use e-mail as a tool to develop communication.

(d) Communication through e-mail

E-mail offers a wide range of complementary applications. We use e-mail for internal use by connecting teacher & student outside of the classroom and between sessions of a given course for advice, assignments, tutoring, information and dialogue. It is also used for distance correspondence and tutoring with students who are away on exchange programs or internships.

(e) Required Software

The regular diagnosis of the students can be done thanks to the use of software like Winkwiz, which give a score on tests comparable to the TOEIC. The asset of this type of evaluation is that, the students can go and practice anytime they want in the resource center and at the speed they want. The flexibility of the program and its accessibility give a student, the opportunity to work individually and according to their needs and personal requirements. The use of Educational Technology in such a structure also allows for regular guidance, tutoring and advice to the students alongside with self-study and autonomous work under supervision and tracking thanks to a software called Net Control. This software gives the teacher an opportunity to look at the students' work, correct, give oral or written feedback, assign new tasks and training plans at any time he or she wishes. It is installed on the computers in the lab and the student simply turns it on and enters his or her name before doing the assignment. The system then records everything the student does and saves the work to be assessed by the teacher. It also allows the student to leave messages to the teacher and to engage in a dialogue about his/her work. As a result of all these new technical and technological devices, we offer our students a more qualitative teaching with more intensive courses and more focus on oral competence in the classroom. The on-line guidance via E-mail is also a real asset for the development of better relationships between teachers and students with more attention paid to individual needs.

Conclusion

In this methodology, students are presented with numerous questions including interpretation of non-verbal literature through computers. They enjoy the language session, while working out their answers from the questions on the monitor. They are given separate answer sheets to note down their answers. The teacher collects the sheets at the end and values them. Finally the result analysis is made. At last, feedback is obtained from the students about the methodology of language learning though computers. It is true that "Computers are always available to give feed back, while a human teacher has to attend other students and other tasks and may be tired or distracted".Hence it is realized that "The Future of learning and the future of computers are sure to go hand – in – hand".

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