



ICT and Teacher Education Curriculum

DR. HEMA P. BHAGWAT

Lecturer, Vaidhya Shri M. M. Patel College of Education, Ahmedabad
Gujarat (India)

Abstract:

"Curriculum development is essentially a process of permanent search for qualitative improvement in response to different changes in the society. As such it is not a static but a dynamic process and should stand on three pillars, relevance, equity and excellence." Curriculum developers must increasingly be demand driven than supply driven. They must be diviners of the learning needs of their students for the future rather than the packagers of subject content in which they are experts. Within the education sector, institutions catering to Teacher education have generally been the slowest and most lukewarm in adapting to anything that is new and off the beaten track. This has severely affected the quality of education imparted in schools and colleges. The teachers in this era of globalization are confronted with varied problems that are anticipated in this new knowledge age. This necessitates redefining philosophy of education for the development of a holistic personality. The paper presents the emerging trends in instrumental technology and proposes a plan of action to overhaul. The B.Ed. curriculum within the parameters approved by the University so that implementation does not face many hurdles.

Keywords: Curriculum, ICT, Teacher Education

1. Teachers' IT Requirement

Generational change in teaching is now reducing the disparity in any case, a reduction that will accelerate in the immediate future. When considered, there is little value in placing a teacher, trained in the 1970s or 1980s who has no orientation to become a sophisticated technology user, in a position where they feel that they are required to compete with a senior student already working in information technology firm outside school. Variations on these issues are likely to become more common in the years ahead. In this connection teachers' Requirement may vary. The requirement of a pre-service teacher trainee will differ from an in-service trainee. The requirements of in-service teachers are more acute as they are unable to cope up with the present situation. Teachers require, levels of essential competence which will enable them to integrate information technology in ways which broaden and deepen the learning environments they create for students, and access to expert assistance, from both Para-professionals and other teachers, when they require it. There have been at least three major ways of using computer technology in education by the teachers.

- Learning about computers from the perspective of programming.
- Using computers to replace other technologies and processes, for example, learning about word processors, spreadsheets and databases.
- Understanding the power of the computer as an information source.

This last phase is all pervasive for it takes computer use out of the realm of the Enthusiast and requires higher order analytical skills of organizing, evaluating and synthesizing information. Increasingly, teachers in schools will be in competition with networking systems, for example, it may happen with the introduction of on-line schools. The curriculum and its transaction can be chalked out according to the specific need of the in-service and pre-service teachers and teacher educators.

2. Contingency Curriculum

The present curriculum is a mindless holdover from the past. Every subject taught today is taught for a reason, should begin from the reverse premise, i.e. nothing should be included in a required

curriculum unless it can be strongly justified in terms of the future need. If this means scrapping a substantial part of the formal curriculum, so be it. There is a need to prepare tomorrow's curriculum today. There is a need to create a super industrial system. In a stagnant society like ours, the past crept forward into the present and repeated itself in the future. In such a society, where ancient is considered as wisdom, the most sensible way to prepare a child was to arm him with the skills of the past-for these were precisely the same skills he would need in the future. There is a need to change this creeping over tendency. It is applicable both for general education and teacher education. We might do this by designing 'contingency curricula' over throwing a standardized one, which aimed at training people to handle problems that not only do not exist now, but which may, in fact never materialize. The curriculum of teacher education should be so contingent and dynamics that it can prepare teachers to face any change in the school curriculum keeping themselves ready for anytime change.

3. Influence of ICT on Education

With the advancement of ICT, there have been revolutionary changes in all the aspects of our lives, so also in education. Distance education is becoming more effective and popular as it is flexible. Many open universities have been offering excellent programmed course material, teleconferencing and videoconferencing facilities, TV programs using EDUSAT, etc. A multitude of distance education courses in science, humanities, IT, management, paramedical courses are available to choose from, several twinning programs, transnational collaborations and on line courses offering foreign degrees are available for a price. But the traditional classroom teaching is still by the lecture method, without much scope for individualized learning. It emphasizes more of knowledge of facts and figures rather than understanding and application which, in turn, encourages rote memorization. Teachers should shed complacency, arise, awake and live up to the expectations of the students and the society by updating themselves about the latest trends and make instruction globally relevant.

4. An Action Plan

- Making computer education and educational technology subjects compulsory. Including ICT topics such as instructional design, programmed instruction, interactive multimedia, e-learning etc. at B.Ed. and M.Ed. levels.
- Giving emphasis a cooperation and collaborative learning while transacting
- the curriculum: (i) covering at least one practice teaching lesson per subject
- (method) by cooperative learning.
- Including concept of constructivism and the constructivist theories including Vygotsky's theory of social constructivism in teacher education curriculum.
- Making provision for following practical work and giving weightage for grading in addition to the action research project.
 - a. Preparing oneself learning material (textual) on any one unit in the subject of specialization (as a teaching aid).
 - b. Preparing programmed instructional material on any one unit on the subject of specialization.
 - c. Teaching of at least one practice teaching lesson per subject (method) using Power point Presentation (as a teaching aid).
 - d. Compulsory surfing of the websites of ten online courses and their reviews.
 - e. Compulsory surfing of the websites of ten foreign University and their reviews.
 - f. Compulsory networking and correspondence via email with at least ten teachers / teacher educators in China, U.S., Japan and Europe.

Making provision for courses which can add on credits to B.Ed. course, which can also be offered to foreign students under twinning programmers and these courses may be certificate courses in Indian fine Arts; Indian culture and Heritage; Indian Handicrafts; Vedic Mathematics; Yoga and Stress Management; Communication skills; Multimedia and Online Learning; Website designing;

Instructional designing; Research Methodology; Foreign language-Chinese, German, French and Japanese and conducting these certificate courses during vacation soon after the end of the academic session and annual examinations so that the vacation could be utilized productivity

References

1. Janardan, P & Vijay K. K. (1997). "Advanced Curriculum Construction", New Delhi: Kaniksha Publishers, Distributors.
2. Maitreya, Balsara (1999)."Principles of Curriculum Reconstruction", New Delhi: Kanishka Publishers, Distributors.
3. Mohanmad, Sharif Khan (2004)."School Curriculum", New Delhi: Ashish Publishing House.
4. Pandey, Mridula (2007), "Principles of Curriculum Development", New Delhi: Rajat Publications.
5. Rao, V.K. (2005). "Principles of Curriculum", New Delhi: A.P.H. Publishing Corporation.
6. Reddy, R.S. (2006)."Curriculum Development in Secondary Schools",New Delhi:Rajat Publications.
7. Sagar, Shiv (2008)."Curriculum Framework for Quality Teacher Education". New Delhi: