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ON LINE TUTORIAL IN EDUCATIONAL LANDSCAPE

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Introduction

'Teachers of today' have to shoulder the responsibility of educating the present generation and to guide them to face the challenges of tomorrow - the coming times! Present day education system is becoming very demanding not only for teachers but also for teacher educators. The challenges that Educators face is compounded by the explosion of knowledge and the emergence of a multiplicity of learning resources and our efforts to transform traditional paradigms of learning and cater to the demands of this changing context. The coming times are going to be more demanding and thus the need to know and understand if the present day teacher is equipped to handle these unprecedented challenges. Thus, the 'teacher of today' needs to keep pace both with current trends and requirements of the future.

The changing role of teachers and the changing definitions of teacher effectiveness have been increasingly studied and analyzed, with research undertaken and the outcomes being fed back into the system to facilitate improvement in instructional practices. The current focus of Researchers, Policy Makers and Practitioners with regard to school teaching is the development of professional competencies, and on the most effective ways of achieving higher levels of commitment and motivation for higher-level performance on the part of teachers. School Education being the preparatory ground for Higher Education, teachers in schools have to effect a transformation from subject-oriented knowledge to general skills; from student mastery of discrete units of knowledge to a

more inter-disciplinary approach; from their *getting taught* to *learning to learn*. In order to achieve these, the teacher him/herself should be cognizant of the latest techniques so that the outcomes can be realized and fruitful.

Teaching and learning go hand in hand. Ultimately what is the teaching-learning process trying to achieve? The answer is: Development of the learner in intellectual, affective and skill areas for total development of personality through curricular and co-curricular programmes. Regardless of the level at which one functions – pre-primary, primary, secondary, higher secondary, collegiate or university – some amount of training would undoubtedly increase one's teaching competency. Appropriate pedagogical training would benefit every one engaged in the task of teaching and eventually, the learner.

We also need to acknowledge that needs of learners vary with age and so does classroom dynamics. Such increasing demands on educators for accountability and challenging differences in student learning needs require more and higher quality professional learning from educators. As a result, educators themselves are seeking more opportunities for professional learning and are demanding that these experiences be more closely related to their specific responsibilities and their students' learning needs.

The need for Professional Development

The professional preparation of Teachers has been recognized to be crucial for the qualitative improvement of education (Kothari Commission, 1964-66). High quality professional learning on an ongoing basis is the best way Institutions can bring about improvement in professional practice and enhance student achievement. When educators focus their learning on specific needs of students they serve, they are able to increase the results of their learning. Teacher Education Institutions must take the initiative to groom teachers in accordance with changing times and demands.

Ongoing training and capacity building is crucial keeping in mind the importance of the profession – that of educating 'Generation Next'. It is imperative that practicing teachers continuously update themselves and keep themselves abreast of the latest in their

subjects. Only then will they be able to make meaningful contributions to the profession. Teachers should be able to connect new concepts, theories and strategies with existing practices. Thus, professional development programs should aim at improving professional competence, understanding innovative methods and making teaching-learning more effective due to these. For these, any professional development program should be directly connected to the work of teachers (thus, be beneficial to them); be ongoing and intensive and provide support through coaching and problem solving. The focus of professional development should not be limited to content, teaching methods, and learning outcomes. According to Intrator and Kunzman (2006), teachers leave the profession when their deeper needs are not met. "Teachers yearn for professional development experiences that not only advance their skills and knowledge base but also simultaneously probe their sense of purpose and invite deliberation about what matters most in good teaching" (p. 39).

Professional development via E-learning

"Technology brings the world of learning to educators, rather than requiring educators to go to the learning."

Technology has made inroads in all areas of education. Technology as a vehicle for staff development, alters the learning environment; provides new structures and media for reflecting, communicating, and acting; facilitates modeling and visualization; allows for construction and discovery of knowledge; expands access to information, networks, people, and ideas; increases the flexibility of time and places for learning; and provides significant resources. If technology is going to be an emerging trend in the educational landscape, it is of vital importance that Teacher Education Institutions take a greater stake in it.

A new and emergent area is that of e-learning which makes use of information and communication technology in education. *E-learning* includes learning experiences enabled or enhanced by technological resources that enriches the learning environment; provides new structures and media for reflecting, communicating, and acting; facilitates modeling and visualization; allows for construction and discovery of knowledge; expands

access to information, networks, people, and ideas; increases the flexibility of time and places for learning; and provides significant learning resources.

E-learning includes multiple uses of technology to facilitate learning. The uses range from the simple to more sophisticated. Videotape and audiotape are simpler forms of technology-mediated learning. Computer-based learning such as computer-aided instruction and tutorials represent different forms of e-learning. Internet-based learning such as online courses and web-based videoconferencing represent still other forms of e-learning.

For the purpose of this *Study*, *e-learning* serves as the umbrella term for all forms of electronically assisted or technology-mediated learning. The similarities between traditional face-to-face staff development and technology-mediated staff development are significant. They require the same level of support and resources to ensure effectiveness. They use many of the same learning processes, including collaboration, inquiry, dialogue, and reflection. In addition, they both seek the same result – to increase student achievement.

The goal of providing the *online tutorial* for professional development was to enhance education through the utilization of technology to develop 'on-demand, anytime, anywhere' learning.

The Genesis Of The Online Module

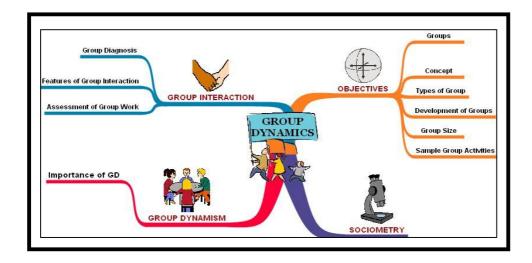
All these concerns led to the conducting of the Study i.e. A Study Of The Current Instructional Practices In The Schools Of Vadodara City. The objective of the Study was to critically review the ongoing instructional practices in the schools of Vadodara city with a view to utilizing the inputs to enrich the Teacher training program and thereby making it more relevant to the future practitioner. The Researchers were also keen to answer the question - How could research be related to the improvement of the present day classrooms?

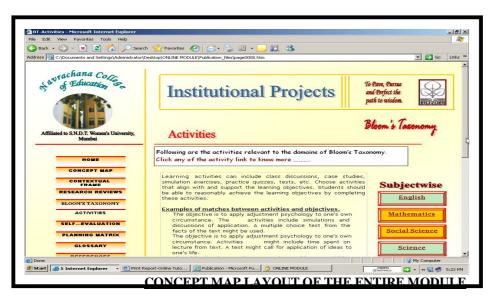
In the first phase of the research Study, the researchers conducted a survey in the secondary schools of Vadodara city. During the survey, they interviewed the teachers and

also observed their classes to find out the existing trends. The authors had taken up a study of classroom processes in the city of Vadodara. Some of major findings indicated that certain crucial areas of teacher education could be enhanced through content enrichment. These were expressed by teachers of schools, in the questionnaire. The focused group discussion with suggestions by Heads of school also pointed to enrichment opportunity. The authors first thought of textual and modular write up and then, acknowledging the significant role that ICT can play for 'anytime anywhere learning' and the demanding schedule that teachers have, they decided to adopt the 'online-module approach'. The objective was to develop updated training modules for the professional development of in-service teachers which would familiarize them with upcoming trends in content areas they expressed difficulty in.

Regarding the Module

The Researchers developed a web-based teachers training module referred to as professional developmental module for teachers (both in-service and pre-service) under the title 'Institutional Project'. The online module caters to the professional needs of practicing teachers and is informative and self-paced with components of self-evaluation to help gauge self (learner) understanding. The module can be used by both in-service and pre-service teachers for their professional enrichment. The salient features include instruction and understanding of the concept through textual matter, concept mapping, illustrations, relevant pictures, self-evaluation exercises and the provision of website addresses for further reading. The e-resources used in the preparation of the module included – MS Publisher, MS PowerPoint, MS Word, Quiz Creator, Inspiration 8.0a IE Trial Version.

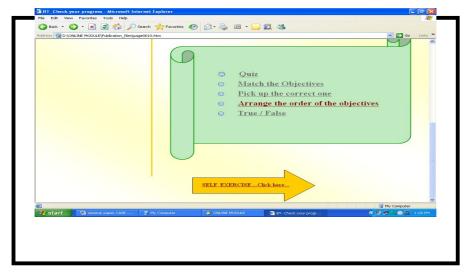




OPENING PAGE OF THE ONLINE MODULE



EXAMPLES GIVEN FOR BETTER UNDERSTANDING



SELF-EVALUATION EXERCISES

The Modules – Its Components

Phase I findings showed that teachers showed inclination to know more regarding the following two areas,

- (i) Blooms' Taxonomy i.e. how to state learning objectives / instructional objectives and the manner in which these can be used to design teaching-learning processes with higher order objectives.
- (ii) Group Dynamics how to design Group/Cooperative learning for completing school/class projects/discussions/... using the knowledge of group dynamics.

Thus, these were the two topics taken up and both sub-modules are explained below.

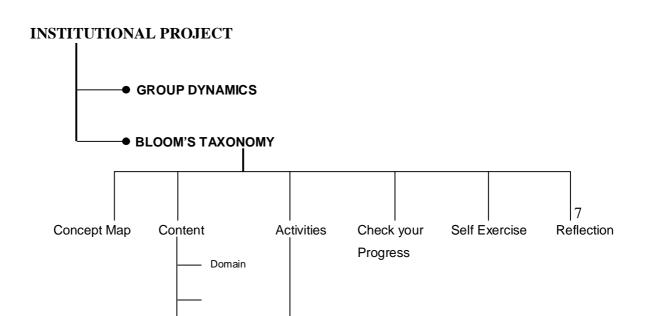
Sub-Module 1: Bloom's Taxonomy

As Teachers we need to understand the importance of Instructional Objectives and the significant role they play in enabling the designing of enriched teaching-learning experiences. In this module, Practitioners would find answers to the following questions

- What are behavioural objectives?
- How do behavioural objectives enable a teacher to design rich teaching-learning experiences ?
- What criteria should a teacher keep in mind while writing instructional objectives?

Structure of Sub-module 1 (Site Map)

This sub module is based on the concept of the Bloom's Taxonomy. The module provides in-depth understanding of 'instructional objectives'.



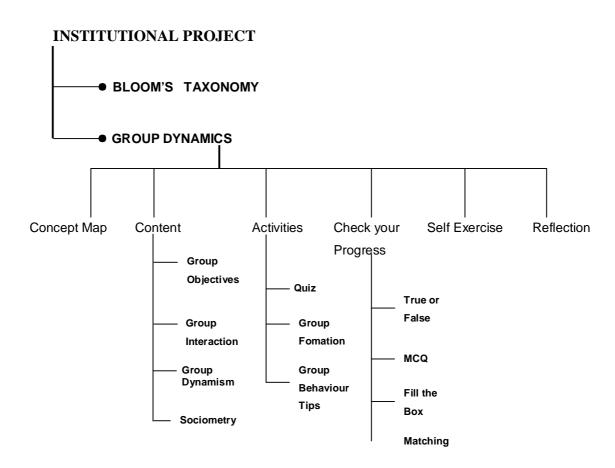
Benefits of Sub-module 1

This module provides knowledge about how to design and write the learning / instructional objectives thereby enhancing the teaching-learning processes. Corresponding activities are designed to enable better understanding.

Sub-Module 2: Group Dynamics

This module deals with knowledge about the 'group' concept within classrooms. Today, this concept is very important for a teacher in order to develop higher order thinking, social behavior and interpersonal skills. This Module provides the knowledge and learning about group formation, dealing with both homogeneous and heterogeneous groups, assessment of these groups, assessment of the learner within the group, behavioral observation i.e. overall dynamism of the group.

Structure of the Sub-module 1(Site Map)



Benefits of Sub-module 2

This module was designed to help teachers / learners deal with their classroom groups. This will give knowledge about how to form groups, how to assign activities, to assess and observe the groups and individual behavior amidst a group.

Conclusion.

Although there are numerous options available to practicing teachers today for their professional enrichment like reading material, attending workshops, inputs from mass media; online learning has its own benefits and consequently is in demand. Moreover, teachers today are more computer savvy and can enrich themselves through this despite their busy schedules and learn at their own pace and time.

This Institutional Innovation was designed keeping this in mind has now reached its final stages. The module has been referred to Experts and also tried out on 'practicing school teachers' and their feedback have been duly incorporated. The Module is being given final touches before it is uploaded on the Institutional Website for the benefit of all practicing teachers.

References

- 1. Intrator, S., & Kunzman, R. (2006). Starting with the soul. *Educational Leadership*, 63(6), 39-42.
- 2. ASCD (2003, July 22). What professional development structures best affect classroom instruction? *ASCD Research Brief, 1*(15). Available in Archived Issues: http://www.ascd.org/portal/site/ascd/menuitem.03e1753c019b7a9f989ad324d3108a0c/
- 3. Garret, M.S., Porter, A.C., Desimone, L., Birman, B.F., & Yoon, K.S. (2001, Winter). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-45.

- 4. Rooney, J. (2007). Who owns teacher growth. *Educational Leadership*, 64(7), 87-88.
- 5. Schmidt, W. (2002, Summer). The benefit to subject-matter knowledge. In *A Coherent Curriculum* by W. Schmidt, R. Houang, and L. Cogan, *American Educator*, pp. 1-17. Available: http://www.aft.org/pubs-reports/american educator/summer2002/index.html
- 6. David R. Krathwal, "A Revision of Bloom's Taxonomy" in *Theory into Practice*, Vol.-41, Number-4, Autumn 2002.
- 7. Killion, J. (1999). What works in the middle: Results-based staff development. Oxford, OH: National Staff Development Council.
- 8. National Commission on Teaching & America's Future. (1996). *What matters most: Teaching for America's future*. New York: Author.
- 9. Ikpeze, C. (2007). Small Group Collaboration in Peer-Led Electronic Discourse: An Analysis of Group Dynamics and Interactions Involving Preservice and Inservice Teachers. Journal of Technology and Teacher Education. 15 (3), pp. 383-407. Chesapeake, VA: AACE.
- 10. Kizlik, B. (2003). *How to write effective behavioral objectives*. Boca Raton, FL: Adprima. Retrieved May 14, 2003, from http://www.adprima.com/objectives.htm
- 11. Lohr, L (no date). *Objectives, sequencing, strategies*. Retrieved May 14, 2003 from http://www.coe.unco.edu/LindaLohr/home/et502_cbt/Unit3/Unit3_menu.htm
- SOGC Org (No date). Writing instructional objectives: The what, why how and when.
 Retrieved May 14, 2003, from http://www.sogc.org/conferences/pdfs/instructionalObj.PDF
- 13. 101 ideas for innovative teachers Edited by:Ádám Merényi, Vince Szabó, Attila Takács Commissioned by Microsoft Hungary Published by Jedlik Oktatási Stúdió Bt.H–1212 Budapest.
- 14. Ref: M.A.Khader 'Teacher Education : How Far We Traversed The Path Envisioned By The Education Commission 1964-66, NUPEA, Shipra Publications Delhi 2008