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FIELD ENGAGEMENT-COLLABORATING THEORY WITH THE FIELD: CRITICAL UNDERSTANDING OF ICT & E-TEACHER EDUCATION

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Abstract- The B.Ed Curriculum shall provide for sustained engagement with the Self, the Child, Community and School, at different levels, and establishing close connections between different curricular areas. The kinds of learning engagement suggested will contribute to reduction of the gap between theory and practice by dovetailing both appropriately. A course on critical understanding of ICT shall be offered as important curricular resource, according primacy to the role of the teacher, ensuring public ownership of digital resources, and promoting constructing approaches that privilege participation and co-creation over mere access to ICTs. In this point of view E-teacher education is the instructional system of processes and activities designed according to the ICT development. E- Teaching adopts the constructivist principles in the designing of learning experiences. This paper focuses on Engagement with the field, Modes of learning Engagement, Critical understanding of ICT, E-Teacher education.

Key Words: Engagement with the field, Modes of Learning Engagement, Theory with Practice, E-Teacher education.

ENGAGEMENT WITH THE FIELD

This curricular area would have three components:

- *Tasks and assignments that run through all the courses as indicated in the structure and its year wise distribution*
- *School Internship*
- *Courses on Enhancing Professional Capacities (EPC)*

COURSE EPC1: READING AND REFLECTION
COURSE EPC2: DRAMA AND ART IN EDUCATION
COURSE EPC3: CRITICAL UNDERSTANDING OF ICT
COURSE EPC4: UNDERSTANDING THE SELF

COLLABORATIVE LEARNING

Collaborative learning is a team process. Collaborative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only learning what is taught but also for helping teammates to learn, thus creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it.

WHY USE COLLABORATIVE LEARNING?

Research has shown that collaborative learning techniques:

- *Promote student learning and academic achievement*
- *Increase student retention*
- *Enhance student satisfaction with their learning experience*
- *Help student develop skills in oral communication*
- *Develop student's social skills*
- *Promote student self-esteem*
- *Help to promote positive race relations*
- *Learning is an active, Constructive process*

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- *Learning depends on rich contexts*
- *Learners are diverse*
- *Learning is inherently Social*

THEORY-PRACTICE INTEGRATION

To what extent do the teacher development tasks focus on the integration of private and public theories and practices? Integration implies the activation of student teachers' experiential knowledge and/or practical experimentation. Experimentation may be indirect or direct. Indirect experimentation involves tasks other than teaching, aiming at preparing for teaching (e.g. communication development tasks, analysis and production of teaching materials, observation of video-taped lessons, etc.).

Direct experimentation in school based and refers to all the tasks involved in real teaching (planning, developing, monitoring and evaluating pedagogical action). Both the types of experimentation should foster pedagogy for autonomy.

MODES OF LEARNING ENGAGEMENT

Teacher educators need to be oriented towards visualizing modes of learning engagement. This means visualizing teacher educator's work in terms of not only classroom lectures or, at best, lecture followed by some interactive sessions, but also in the form of other relevant activities. Such as seminar, field observation, experimentation, self study, library work, small group explorations, project, compilation of resource materials, discussion, internet browsing, study of learning material, any other ones that the teacher educator and the student-teachers find appropriate. The nature of engagement of the student teachers will be of the following kinds.

- *The curriculum framework is so designed that the student-teachers internalize the nature of education and pedagogic process through enriched experiences.*
- *The kinds of learning engagement suggested will contribute to reduction of the gap between theory and practice by dovetailing both appropriately.*
- *The curriculum framework emphasis the use of varied modes of learning engagement in accordance with the requirements*
- *Interactive processes where group reflection, critical thinking become very crucial theoretical inputs and are embedded implicitly in various courses*
- *Focused reading and reflection*
- *School Based Practical*
- *Case study, Seminar, Workshop, Lecture-Discussion Session*
- *Observation-Documentation-Analysis*

ROLE AND IMPLEMENTATION OF ICT BASED CURRICULUM

Integration of Information and Communication Technology in the curriculum at tertiary level is vital. In this era of e-education, e-business and e-administration in cybernetic society. The ICT knowledge be highlighted, the curriculum should comprise of examples of ICT use be prominent.

The uses of multimedia like television, Tele-conferencing, radio counseling, video counseling, and computer assisted instruction, use of hard ware and software in computer technology is essential. The preparation of PowerPoint presentation has become a common phenomenon in the present system of education.

COURSE *EPC3*: CRITICAL UNDERSTANDING OF ICT

Preparing teachers to use technology in a classroom is an important step for ICT enabled education in the country. This course will focus on moving beyond computer literacy and ICT-aided learning, to help student-teachers interpret and adapt ICTs in line with educational aims and principles. It will explore ICTs along three broad strands: teaching-learning, administrative and academic support systems, and broader implications for society.

ICTs have often been seen as a stand-alone subject, consisting of a finite set of proprietary applications, taught to children directly by technology experts, bypassing teachers, which has diluted possibilities of teacher's ownership, enhancement of expertise and engagement. Seeing ICTs as an important curricular resource and an integral part of education, according primacy to the role of the teacher, ensuring public ownership of digital resources created and used in education, taking a critical perspectives on ICTs as well as constructivist approaches that privilege participation and co-operation over mere access, are principles that the course will help teachers explore.

Applying these principles can support Teacher Professional Development models that are self directed, need based, decentralized, collaborative and peer-learning based, and continuous, in line with the NCFTE, 2009 vision for teacher

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education. This course will help student-teachers reflect critically and act responsibility to prevent how ICTs are used to support centralization and proprietisation of larger knowledge structures.

AIMS OF COURSE

- *Understanding the social, economic, security and ethical issues associated with the use of ICT*
- *Identify the policy concerns for ICT*
- *Describe a computer system*
- *Operate the Windows and/or Linux operating systems*
- *Use Word processing, Spread sheets and Presentation Software*
- *Acquire the skill of maintaining the computer system and the skill of trouble shooting with the help of Anti-Virus and other tools*
- *Operate internet with safety*
- *Elucidate the application of ICT for Teaching Learning*
- *Develop various skills to use computer technology for sharing the information and ideas through the Blogs and Chatting groups*

ENGAGEMENT WITH THE FIELD/PRACTICUM (*EPC3*)

- *Installation of operating system, windows, installation of essential software and utilities;*
- *Projects that may involve the hardware like LCD projector, digital camera, camcorder, scanner, printer, interactive white board and software like word processors (MS Word/ Libre Office), spread sheet and Slide Presentation (PPT/impress); and/or Creating and using Blogs and Google Groups, Google Docs.*
- *Develop a report on preparing a learning designing on any topic from their methods while using internet resources. They report should mention the details of navigating, selecting, saving and evaluating the authenticity of the material and also mention how it adds or justify the facts, -figures (data), graphics, explanation and logic of the topic.*
- *Teaching with a multimedia e-content developed by the student.*

CONCEPT AND FEATURES OF E-TEACHER EDUCATION

E-Teacher Education is the instructional system of process and activities designed according to the ICT development. Characteristics and models of e-learning, principles of formal communication, principles of e-education, and principles of competence based education system, etc. E-teaching adopts the constructivist principles in the designing of learning experiences. The concept of collaborative teaching is the fundamental construct to develop e-teaching scenarios.

There are different forms of e-learning courses (Milosevic et al, 2009). They are as follows;

- *E-learning programmes are broadcast formats, lecturers reviewing, class demonstrations, reviewing other online materials; this from uses multiple sites, interaction via video conferencing, online text messaging; video conference-based teaching approach is important part of the (presented) curriculum.*
- *Individualized self paced instructional procedures*
- *Hybrid teaching models*
- *E-learning based on the extended communication in distance situation and without immediate connection.*

There are three dimensions of the teachers' ICT competencies (Awouters et al, 2008);

1. *The teacher knows what learning activities using ICT can be used in teaching (ICT Awareness)*
2. *The teacher has the necessary skills for using hardware and software (ICT readiness) and*
3. *The teacher knows the pedagogical-didactical elements of ICT (ICT drill and practice).*

Teacher activities in the e-teaching scenarios can be broken into two major tasks: providing the content for the students and supporting communication between students and tutors.

THE STUDENT TEACHERS AND TEACHER EDUCATORS WOULD BE ABLE TO:

- *Functionally explain the process and dimensions of e-education, e-teaching and e-learning;*
- *Research the basic principles of the learning base on the multimedia, analyze interaction as well as synchronous and asynchronous e-learning / e- teaching communication;*
- *Select and apply the adequate technologies and tools in the effective creation of different e- learning solutions;*
- *Understand the functioning of the hardware, software and communication e-learning infrastructure;*
- *Create configuration and apply different multimedia devices, software tools, video conferencing solutions in the process of e-learning development and realization;*
- *Design, develop and realize e-learning procedures based on the specific educational needs of individuals, groups and systems;*
- *Develop assessment plan, e-assessment techniques, collect data of the achievement, and interpret student performance in the frame of the formal, informal and social learning;*

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- *Analyze and improve roles of e-educator, e-manager, e-administrator, manage one's own learning and make plans for professional development;*
- *Resolve e-educational problems and innovative e-learning and e-teaching process.*

GENERAL CONCLUSION

This curricular area of engagement with the field would serve as an important link between the other two broad areas and the field, through its three components. Collaborative learning is interactive and it is a team process. The nature of teacher development tasks greatly determines the quality of teacher education this area involves transparency and Theory-Practice integration. Teacher educators need to be oriented towards visualizing modes of learning engagement in flexible and diversified forms in accordance with the nature of understanding and competence, particular themes. A course on critical understanding of ICTs shall be offered as an important curricular resource, according primacy to the role of the teacher, ensuring public ownership of digital resources, and promoting constructivist approaches that privilege participation and co-creation over mere access to ICTs. Outcomes of e-teacher education resolve e-educational problems and innovative e-learning and e-teaching process.

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