THE USEFUL INNOVATION & PRACTICE FOR TEACHER EDUCATION

Sachin. G. Ingale.
Assistant Professor, S.S.A. College
of education,Soalpur

Pushpanjali Sachin Ingale
Assistant Professor, Dept.of Edu.
Solapur University,Solapur

Innovation is the application of better solutions that meet new requirements, in articulated needs, or existing market needs. This is accomplished through more effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society. The term innovation can be defined as something original and, as consequence, new that "breaks in to" the market or into society. One usually associates to new phenomena that are important in some way. A definition of the term, in line with these aspects, would be the following: "An innovation is something original, new, and important - in whatever field - that breaks in to (or obtains a foothold in) a market or society."

While something novel is often described as an innovation, in economics, management science and other fields of practice and analysis it is generally considered a process that brings together various novel ideas in a way that they have an impact on society. Innovation differs from invention in that innovation refers to the use of a better and, as a result, novel idea or method, whereas invention refers more directly to the creation of the idea or method itself. Innovation differs from improvement in that innovation refers to the notion of doing something different rather than doing the same thing better.

• INNOVATIVE PRACTICES

1. Cooperative or collaborative learning
Cooperative / collaborative learning is interactive; as a team member, the student teacher:

1. Develops and shares a common goal **2.**Contributes his/her understanding of the problem: questions; insights and solutions **3.**Responds to, and works to understand**,** others' questions, insights and solutions **4.** Empowers the other to speak and contribute, and to consider their contributions **5.** Is accountable to others, and they are accountable to him/her **6.**Is dependent on others, and they depend on him/her

- **Elements of Cooperative Learning**
- **1.**Positive Interdependence   **2.**Face-to-Face Interaction   **3.**Individual and Group Accountability   **4.**Interpersonal and Small-Group Skills   **5.**Group Processing

- **Why use Cooperative Learning?**

1. Promote student learning and academic achievement **2.**Increase student retention

3. Enhance student satisfaction with their learning experience **4.**Help students develop skills in oral communication **5**.Develop students' social skills **6.** Promote student self-esteem **7.**Help to promote positive race relations

2. Constructivist and Reflective

Reflection is a natural process that facilitates the development of future action from the contemplation of past and/or current behavior. Reflection refers to the **ongoing process of critically examining and refining practice, taking into careful consideration the personal, pedagogical, societal (including social, political, historical and economical) and ethical contexts associated with schools, classrooms and the multiple roles of teachers** (Knowles, Cole and Press wood, 1994). The term "reflection." While Dewey (1933) believed that reflection is an aim of education, others view it as a means to help teachers become effective. Much of the writing on reflection in teacher education is derived from Dewey (1933). He believed that reflectivity involves active, persistent and careful consideration of any belief or practice in light of its supporting grounds and its eventual consequences. Dewey implies that two distinct components are involved in reflective thinking: the process and the content. In order to have a better understanding about teachers' reflective thoughts, both the process and the content of reflective thinking must be considered simultaneously.

1. Reflection is not biologically or psychologically determined, nor is it pure thought; reflection expresses an orientation towards action and is about relation between thought and action in real historical situations. **2**. Reflection is not the individualistic working of the mind as a kind of mechanism or speculation; it presupposes and shapes social relations. **3**. Reflection is not value-free or neutral as regards values; it expresses and serves concrete human, social, cultural and political interests. **4**. Reflection is not indifferent or passive towards social order, nor does it extend socially accepted values; it either reproduces actively or transforms the practical ideologies that support social order. **5**. Reflection is not a mechanical process or a purely creative exercise to construct new ideas; it is a practice that

expresses our power to reconstitute social life through participation in communication, decision making social action.

• Role of Reflection At Individual And Social Levels

1. Promoting critically reflective teachers is a value laden goal, with direct implications for deciding the direction of reflection, its aims and scope. **2**. Critical reflection involves critical reason, critical self reflection and critical action. **3**. Critical reflection should facilitate teacher autonomy, especially through the mediation between pedagogical goals and situational constraints, within a research-like approach to teaching, whereby educational contexts are questioned and scrutinized in order to be understood and changed. **4**. Critical reflection must entail an understanding of the nature and goals of school education and of its role in social transformation.

Need for Reflective Teacher Education

1. Professionalization has become a very important issue in the field of education. Reflection on one's own work is a key component of being a professional (Schon, 1983) and is essential to teacher education. Teachers must examine their beliefs, assumptions and biases regarding teaching and learning, and determine how those beliefs influence classroom practice.

2. Teachers should examine any cultural baggage they may carry in order to evaluate its appropriateness in teaching.**3**. Since teaching is often an uncertain, dynamic and complex practice, teachers must make constant judgments about appropriate goals, teaching methods and students' learning.

3. Problem Based Learning

Problem-based learning (PBL) is used in a number of disciplines as a way of engaging students in 'real' problems. Unlike conventional teaching, PBL starts with a problem and requires the student to research, select, analyse and apply information and theories to solve it. Students work in groups or teams to solve or manage these situations, but they are not expected to acquire a predetermined series of 'right answers'. Instead they are expected to engage with the complex situation presented to them and decide what information they need to learn and what skills they need to gain in order to manage the situation effectively (Savin-Baden, 2000) Characteristics of problem-based learning.

1. Using stimulus material to help students discuss an important problem, question or issue

2. Presenting the problem as a simulation of professional practice or 'real life' situation

3. Encouraging critical thinking and providing limited resources to help students learn from defining and attempting to resolve the given problem **4**. Students working co-operatively as a group, exploring information in and out of class, with access to a tutor (not necessarily a subject specialist) who knows the problem well and can facilitate the group's learning process **5**.Students identifying their own learning needs and the appropriate of available resources **6**. Reapplying this new knowledge to the original problem and evaluating their processes (Boud and Feletti, 1997: 4) the advantage of students working upon real or simulated situations is that real problems do not have simple solutions, but require comparison and analysis of resources, strategies and costs.

What the **PBL** approach does is facilitate a dialogue between the student, tutor, and peers (and in some cases external parties), which helps the individual make sense of his or her learning. **PBL** offers a genuine experience or context in which reflection can take place. Unlike traditional problem solving where the student is directed towards appropriate resources **PBL** forces students to think on their feet and draw on previous experience to transfer to new settings.

4. Personal Development Planning and Portfolios

The educational aim is to provide students with a structure for thinking about and planning their own development. PDP might be seen as a process of evidencing learning and reflection. Portfolios and records of achievement are the common forms in which the PDP process is presented. The advantage of PDP is that it provides a rounded picture of the capabilities of an individual. Usually consisting of three parts (a checklist of skills or competences achieved, evidence of achievement and a reflective piece on how the skill has been developed) PDP offers more information than a certificate and engages students in a process of thinking about their learning.

PDP will help student teachers

1. Become more effective, independent and confident self-directed learners **2**.Understand how they are learning and relate their learning to a wider context **3**. Improve their general skills for study and career management **4**. Articulate their personal goals and evaluate progress towards their achievement **5**. Encourage a positive attitude to learning throughout life

PDP & Reflective Teacher Education helps to develop

1. Problem solving and critically reflective skills. **2**. Communication skills.**3**. A capacity to adapt to changing circumstances.**4**. An ability to work in teams.**5**. Networking skills.**6**. The ability to use and apply communication technologies.**7**. Awareness of and the ability to address diverse learning needs.**8**. Awareness of the changing education environment and of their role in equipping young people to operate effectively within this environment.

5. Constructivist Teacher Education

Constructivism is a philosophy of learning founded on the premise that, by reflecting on our experiences, we construct our own understanding of the world we live in. Each of us generates our own "rules" and "mental models," which we use to make sense of our experiences. Learning, therefore, is simply the process of adjusting our mental models to accommodate new experiences.

The 5 E Model of Constructivism

1. Engage **2**.Explore **3**. Explain **4**.Elaborate **5**.Evaluate

Features of A Constructivist Classroom

1. Student autonomy and initiative are accepted and encouraged. **2**. The teacher asks open ended questions and allows wait time for responses. **3**. Higher-level thinking is encouraged. **4**. Students are engaged in dialogue with the teacher and with each other. **5**. Students are engaged in experiences that challenge hypotheses and encourage discussion. **6**. The class uses raw data, primary sources, and manipulative, physical, and interactive materials.

In a constructivist classroom, learning is . . .

1. Constructed **2**. Active **3**.Reflective **4**.Collaborative **5**. Inquiry based **6**. Evolving

Rejected bits of information may just not be absorbed by the student. Or they may float around, waiting for the day when the student's understanding has developed and permits a fit

6. E-teacher Education

Educational systems worldwide insist on using information and communication technologies (ICT) to teach students who gain the knowledge and skills needed for the future knowledge society (Jimoyiannis and Komis, 2007). E-teacher education would develop in a positive attitude towards e-learning and using computers in their future classrooms. E-teacher
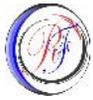
education is the instructional system of processes and activities designed according to the ICT development, characteristics and models of e-learning, principles of formal communication, principles of e-education, and principles of competence based education system, etc. E-teaching adopts the constructivist principles in the designing of learning experiences. The concept of co-operative teaching is the fundamental construct to develop e-teaching scenarios.

7. Value-Based Teacher Education

Values are integral to the process of education. They are not add-ons. All education is, in sense, value education. 'Value-less' or **'value neutral'** education is a contradiction in terms, given the meaning of 'value' and 'education'. Education is a process of bringing about 'desirable' changes in the way one thinks feels and acts in accordance with one's concept of the good life. In this sense, education necessarily involves the transmission of values. Our aims of education— **development of personality, pursuit of knowledge, preservation of culture, training of character**—are no more than statements of our value preferences. Towards realizing them we design a curriculum, a planned collection of 'desirable' knowledge, skills, attitudes and values that we wish to pass on to the younger generation. And this we do in ways that do not violate the freedom and autonomy of the learner.