Teacher, Education and Development: A Few Reflections in Indian Social Fabric

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Abstract: Now-a-days it is an axiom that education necessarily a social phenomenon, having strong bondage with prevailing culture, within which the process of education take place. As such, culture appears as an intervening factor in the educo-sociological research and thereby keeps tremendous impact upon the objectivity of ongoing educational researches.

In its pre-phase, the paper aims to explore the social base of education in the midst of educosociology in consonance with research on 'social aspects of education'. Methodologies and approaches, as appears as a trend in Indian academia is highlighted in this phase.

The section is followed by the culture-driven approach of education. Existing socioeducational fabric of India is critically synthesized in this phase.

Third section of the paper thrives to explore the status of 'Education' in a 'disciplinary' perspective, obviously in Indian context.

Global effect over education vis-à-vis gestalt social development is analyzed at breath in the immediate next section of the paper with the help of few quantitative indicators of educational development, following juxtaposition approach in Asian context, supplemented by the experience of the Asia and Pacific region in this new millennium.

Fifth section of the paper is devoted to explore impact and interactive effect of education, technological-education and socioeconomic-development in close association with manpower planning, which is felt as an urgent need as the present juncture of time to enhance the income-potentiality and in consonance, life-condition of the cross-section of the mass-population in the region.

Penultimate section of the paper hinges over various pertinent issues relating teacher education system in Indian social fabric, which addresses the issues like the conceptual conflict of considering teaching as a profession in one hand and as mission in other, the mechanized approach of preparing teacher, skill-aspect of teaching, assessment of prior learning, impact of technology over teaching and the like.
Keywords: Educosociology, Global Effect, Technological Education, Manpower Development, Human Capital, Skill, Unit of Competency, Elements of Competencies, Performance Criteria, APL, Soft Skill

> *"Existing educational institutions were created to meet the need of a society that is first disappearing. We need new educational organizations that can exploit the new technologies to meet the need of twenty- first century. Economic development will depend as much on the success of creativity and supporting such organizations, as on establishing the technological infrastructure. It is critical to get*

this right because those countries that harness the power of multimedia communication for education and training purposes will be the economic powerhouses of twenty-first century. The development of modern communications and information technologies is becoming a major instrument for widening access to education and training on a cost-effective basis while also enhancing its quality."
----Tony Bates

1.0.   Introduction to Educosociology

Education, being a broader connotation, defined by different scholars in different ways, in different approaches and from different perspectives. It is closely related with society as well. Eminent sociologists and educationists categorically establish the function of education and its close association with the society, where they opine that education is a social process *[Ashley et. al., 1969]*. Feinberg, way back to 1983, in his book 'Understanding Education: Towards a Reconstruction of Educational Inquiry opines, *"... Education is best understood by recognizing that one of the functions of any society is that of maintaining intergenerational continuity – that is, of maintaining its identity as a society across generations and even in the context of many possible and significant changes, and that is the activity and institution of education, both-- formal and informal, that carries on this function."*

Nowadays it is widely accepted that any inquiry into educational process necessarily incorporates the society within which the process of education takes place. Present practice of social science research is oriented towards positivistic approach, resulted due to mere imitation of the west. Shifting its attention from positivism, social science research in our country aught to emphasizes much over the humanistic approach where interrelationship among values, interests, actions and power of the social atom (i.e., human individual) is taken into consideration along with the process of changes in society. Since the outset of the last decade, many alternative approaches to study 'social processes' and 'research in the field of education' have emerged across the globe, resulting to numerous confusions, opinions, counter opinions and conflicts. All these happen due to their motto to compete against one another to establish their superiority and in search of acceptance from scholars and researchers *[Myrdal, 1969]*.

2.0. Education and Culture

Whitehead (1962), the ever-recalled educational thinker utters in his well-known book, 'The aims of education and other essays', *"...Culture is activity of thought, and receptiveness of beauty and human feeling. Scraps of information have nothing to do with it. A merely well informed man is the most useless bore on God's earth. What we should aim at producing is men who possess both culture and expert-knowledge in some special direction. Their expert-knowledge will give them the ground to start from, and their culture will lead them as deep as philosophy and as high as art."*

He also considered culture as the basic aspect of education, which is obviously having its root in the society within which an individual is born and is grows up. This advocates that the process of education as well as the product of the very process coexist with society.

Irrespective of societies, culture possesses its own value. Being a component of education, it transmits value to education. Therefore, in respect of education in general and to be more specific, in educational research, especially in social sciences, the attempt to carryout value-free research is hardly possible, if not completely impossible *[Roy, 2004]*. An

attempt of mere quantitative research on social aspects of educational process may contribute specific information, but may hardly contribute to knowledge until and unless those are generalized in the greater society *[Hansen, 1967]*. However, one has to agree about the restriction of imposing personal values in the process of observation and recording the findings of social-research in education because of the reason of ethical consideration. Ethnocentrism acts as a hidden current and often influences the social aspects of educational research and it is more true in our country India. The tendency needs to be avoided.

Higher education in India witnessed phenomenal growth during last thirty years and the extent of growth is much more in the recent past *[Selected Educational Statistics, MHRD, Govt. of India, 1999-2005]*. As a result, the scope of educational research in India has expanded a lot. [Experience reveals that this expansion has helped to enrich other allied disciplines such as sociology, social anthropology etc., much more, as compared to that of education] [1]. Handful number of training organizations are also available today in almost each and every part of the country, extending training programmes to enrich the human effort to pursue research in educosociology with sophisticated methodologies. Expansion of higher education in course of time helped people interested in education to pursue formal research programmes and training (i.e., M.Phil. etc.) in education. Right now, as many as eighty-four higher learning institutions, if not more, across the nation, extending the scope of such training to the scholars, emphasizing over various dimensions of education, with largest share towards educosociology [2].

In spite of all these efforts, unfortunately the field of educational research failed to establish 'education' as an independent discipline of study *[Roy, 2005]*. This may be due to the nature of interpretation of 'education,' where cognitive-set of the researches in the field are mostly enriched by other allied disciplines than that of education. The basic requirement of establishing a discipline, as we all know, depends upon the 'number' and 'quality' of research in the field, which, in its turn, enrich the number of theories in the discipline, help evolving stabled methodology, and also offers (more or less specified) boundary for the discipline *[Peters, 1983, Roy, 2005a]*. Statistics says that thousands of doctoral and post-doctoral research studies has been completed during preceding five years, out of which one hundred and ninety-two (192) research studies (up to June, 2006) hinge over the area of educational research in relation to social process [3]. However, except a very few hand counted, none of those contributed, neither for forming theory, nor for evolving methodology. It is crystal clear that most of the researchers are habituated to adopt methodologies from allied disciplines. The result reveals a dearth of 'sound methodology', leads to less number of 'theories' and lack of 'more or less specified boundary' for the discipline 'Education', which are the pre-requisites for the emergence of a discipline. Apart from the exceptions, to be more frank, the domain has become an attractive platform for those who failed in their respective disciplines and thereby oriented themselves with this very platform for their own survival as 'academician' *[Roy, et. al., 2004]*. Neither they are inclined to contribute for developing theory and evolving methodology of education, nor are they capable enough of doing so [4]. Another trend is also noticeable which reveals that a handful number of eminent scholars in education perceive pedagogy and education synonymous, which is mere misconception. As a result, 'education' remains an inter-disciplinary approach in which a Ph.D. is produced in every eighteen (18) hours (or may be even less than that) [5]. Controversial issues prevail without any feasible solutions.

3.0. Global Effect and Development

It should be accepted by almost each and every hand that at the present juncture we are supposed to think in global perspective. The world is 'expanding' due to advancement in communication technology. From economic point of view, the world is polarized in two extreme poles – 'the developed world' and 'the developing world'. Economically self sufficient countries are termed as developed countries, where as the rest became known as developing countries. Self-sufficiency of a country depends on the economic stability [6]. Therefore every nation thrives on enhancing their economic condition. Today it is an axiom that economic self-sufficiency is the precondition of development [7]. Various research studies [8] and statistics reveals that developed countries posses almost a cent percent literacy among their population. However exceptions are also there. A glance perusal of the situation of the Gulf countries reveals that though they are rich, but not always developed, due to lack of literacy [9]. Recent history of those countries advocate that due to lack of education, they failed to keep up their economic stability and richness. Lack of education is one of the major causes of wastage and deteriorated economic condition. So it may be assumed that education among the mass leads to development and enhance economic condition, which is further necessary to keep up and thereby to enjoy the developmental effect [10]. The argument may be more clear if we can have a comparative sketch of index of education and index of economy [11] of a bunch of nations in Asia as given in the following table, where a high positive correlation is visible between the two major indicators of human development.

Table 1: *Education and Economic development in Asian countries*

Country Name	Education Index	GDP Index
Bhutan	0.33	0.45
Bangladesh	0.38	0.39
Pakistan	0.41	0.46
Nepal	0.45	0.40
India	0.54	0.47
Cambodia	0.64	0.43
Maldives	0.66	0.89
Myanmar	0.74	0.41
Indonesia	0.78	0.59
China	0.78	0.57
Malaysia	0.79	0.73
Vietnam	0.82	0.47
Sri Lanka	0.82	0.54
Thailand	0.83	0.70
Honking	0.83	0.92
Singapore	0.85	0.94
Philippines	0.90	0.59
Japan	0.94	0.92
Korea	0.95	0.82

Source: UNDP, Human Development Report-2001, Oxford University Press, New Delhi.

4.0. The experience of Asia & Pacific in 21st Century

The region of Asia and the Pacific consist of huge number of small and large countries over a vast area of the world. As a result, a diversified culture, people, and developmental patterns can be observed here. The region covers almost half of the world population and almost 70% of the population of the developing countries [12]. However it accounts for only

around one-tenth (1/10th) of the world's gross national product (UNDP, 1999). The region includes the largest countries of the world (viz. China, India) and some of the smaller countries such as Bhutan. The region also includes countries with varied economic condition. The poorest countries (such as Bhutan and Cambodia) and the affluent countries viz. Singapore, Japan, Korea are also included in the very region.

So far the economic potentialities of these countries are concerned, a change is perused in due course of history, which is mostly guided by colonial rule *[Tilak, 2001]*. Most of the models of educational development in the region are either borrowed or imposed by colonial rulers [13]. The existing system of education and development in China and India, respectively, advocates the fact. However most of the countries in this region can adopt the imported models to their local environments, purely due to effective market pressures in some countries, and partially a more authoritarian approach to education in others *[Papanek, 1988]*. Irrespective of waive of globalization, several of these countries are by nature religious and remains tradition-bound societies in modern, technologically developing world. Besides, most of these countries are having their own historical and unique cultural background, bracketing their respective social, political, and economic institutions to inspire and guide its developmental goals *[Huq, 1975]*.

5.0. Education, Technological Education & Socioeconomic Development
Right now, countries in Asia and Pacific region are possessing varying stages of socio-economic development from developed, to newly industrializing, to still under developed; where some of the countries are characterized as 'modern' some are still 'traditional'. They differ on various developmental indexes; for example, on the economic indicators, such as their market potentiality, [14] standard of living (measured with the help of gross national product, abbreviated as GNP), per capita income, social indicators like life expectancy, health status, and other major developmental indicators viz. poverty and income inequalities- which widely differs across sub--region, and between the countries. Demography and political situations also varies significantly in the region, all of which possess a tremendous impact over the system of education in general, and over various segments of education, in particular, with a synergic impact. In its existing scenario, even developing countries can also afford to make appropriate investments in education and thereby achieve economic miracles *[Tilak, 2001]*. However one of the most notable differences can be pressured so far the quality of education prevails in the region. The experience of majority of the developing countries reveals a comparatively high pupil-teacher ratio, which ultimately leads to high dropout, low retention, and lower promotion rates, and finally lowers the level of students' achievement.

5.1. Development Problems
Though education, as often argued, is the vehicle for development, however there remain various problems in the process of its social execution. Priority towards education – in terms of level is not well thought of in India, as like of many nations in the Asia and Pacific region. A major disparity prevails among them so far gross enrolment ratio is concerned.

5.2. Technical Education
Technical education in Indian academia is yet to be defined. It is combined with varied interpretations, definitions and observations, which, in course made it difficult to define what actually technical education indicates *[Roy, et. al. 2005]*. To some, it represents the very segment of education, which deals with technical dimensions and subjects, such as varied engineering trades, on which students may imbibe skill; to others it is the segment of

education entrusted with the responsibilities to prepare technical hands to handle certain restricted engineering operations, where as other think it as a process of developing a cadre of engineers *[Roy, 2005]*.

Irrespective of these conceptual conflicts, one has to agree over the phenomenon that the very gamut of education thrives to develop the technical skill-component of the learner, may be it at certificate level, diploma, degree or doctoral levels. Up till date, studies in this area may be classified into two broad categories such as the education in the respective trade in one hand and development of methodology in the process of imparting content knowledge in other hand. Unfortunately in the Indian scenario, research in the second dimension is till in the stage of infancy [15]. This may be due to the reason of non-familiarity or lack of familiarity of those involved in the process to imparting training and research methodologies to the technical teachers. The scenario is not much different in other gametes of education.

5.3. Manpower Development

With a view to raise the standard of manpower and thereby to enhance their potentialities, the so-called developing countries in Asia and Pacific need to adopt appropriate policies for expansion of (skill) education, keeping in view the emerging needs of the respective nations and the region as well. The technology education, which comes under the preview of higher education, therefore need be given proper weightage. Sudden and huge-expenditure, massive proliferation of the technical education system, and enhanced enrolment without carrying out any future manpower survey should no way be helpful for enhancing the standard of human resource. Rather such attempt will invite different sorts of problems with different magnitude (which is presently experienced by the country like India) [16]. Proper planning is inevitable so far education in science and technology is concerned. It has been observed, while East Asian economy have been successfully build up huge stock of human capital and utilizing those for national development, India being the third largest reservoir of scientific and technical manpower in the world, is yet unable to reap sizable economic benefits. Science and technology education will become futile, until and unless it is tagged with social research and development (R&D) activities. Therefore apart from supplying sufficient 'fresh-blood' on technical education, research and innovation should also be enhanced in this direction. Experience of Japan can be taken up as a model by the rest of the world, which, even being an Asian Country, excelled its economy, and is much ahead, not only of other countries in Asia, but also of other developed countries in the world [17]. This becomes possible with an investment of nearly 3 percent of GNP over R&D activities, along with a strong feeling of nationalism among the cross sections of the population.

5.4. Human Capital

In contemporary economic analysis, the emphasis has, to a considerable extent, shifted from perceiving capital accumulation in primarily physical terms to viewing it as a process in which productivity of human beings is integrally involved *[Sen, 2000]*. For example, through education, learning and skill-formation, people can become much more productive in course of time, and this contributes a lot over the process of economic expansion. In recent studies of economic growth, often influenced by empirical readings of the experiences of Japan and the rest of East Asia as well as Europe and North America, there is much greater emphasis over 'human capital'. Human capital helps in enhancing the human capability, and in consequence, enhances the social and economic indicators of human development *[Backer, 1964]*. Technical education directly contributes for human development. This is the very segment of education, which has its immediate impact over the society at large. Research in the very domain also helps to bring structural change in the society. Therefore with a view to achieve development, proper attention is needed over technical education and research.

Education (including both soft and hard skill) makes the human beings more efficient in production of commodity or in extending services, which is also a human capital. These should add value to economy and also to the income of a person. But even with the same level of income, a person may benefit from education-- in reading, communicating, arguing, in being able to choose from alternatives in a more informed way, in being taken more seriously by others. The benefit of education thus exceeds its role as human capital in producing commodity *[Sen, 2000]*. In consequences, if a person can become more productive in making commodities through better education, better health and so on, it is not unnatural to expect that s/he can, through these means, also directly achieve more and have the freedom to achieve more to lead his/her life. In this way, the process of development follows a rotating cycle and thereby accelerates the rate of development.

In the twenty- first century, not only the people of the Asia and Pacific, but all over the world having high hopes that new technologies, mostly in the sphere of information technology, will lead to the healthier lives, greater human freedom, increased knowledge (not mere information) and more productive livelihoods. Though at the end stage of the last century, (to be more specific, since 1990s), massive gain was achieved by some nations in the wave of globalization, which was the output of technological breakthroughs, but time has come to rethink over the supremacy of market and technology. No doubt, market is a powerful vehicle of technological progress; but not powerful enough to create and thereby to defuse the technologies needed to irradiate poverty in SAARC and other zones. Affluent societies may gain especially high rewards from new technologies, but they also use to face several challenges in managing risks. And it is mostly the so-called third world countries who are the worst sufferer of technological risks due to their poor safety, health and environment [SHE] measures.

6.0. Education and Teacher: The HRD Approach

Irrespective of levels and types of education, teachers play a pivotal role in the process of implementation of the policies, formulated to achieve the desired goal in the qualitative improvement of education.

Effectiveness and *performance* of the teachers depend upon a sequel of factors and variables, some of which can be grouped under psychoeducational attributes. Teachers' interest towards teaching is one such major psychoeducational factor, which possesses a tremendous impact over the entire process of teaching-learning *[Roy, et. al, 2005]*.

Education of the day, as is apparent in India, facing sequels of problems to sustain without creating sufficient space for diversity within the curriculum frame as well as students and teachers. Though it is argued by the predominant occidental psychopedagogical thinkers that the days will come, converting teachers into 'learning-assistants' and transforming students into 'clients' however irrespective of levels and types of education, the traditional oriental *'guru-sishya parampara'* [i.e., the tradition of the guide and disciple] still prevails in our academic scenario *[Basu, 1972]*. Obviously, teachers are expected to be the co-learner with the students, the mentors and facilitators, especially when the nature of learning involves a major share of acquisition of skill *[Barr, & Tagg, 1995]*. Technical education, in its middle level, much emphasizes over developing skill among the students, which fall under the psychomotor domain of taxonomy of learning.

As like in other sphere of education, in technical education system too, teachers play a pivotal role in the process of implementation of the policies, formulated to achieve the desired goals for the qualitative improvement of education. In fact in educational scenario, teachers act as a 'pivot' on which the entire process of education rests on *[Roy, 2005]*. Therefore the quality and psychological makeup of the teacher possess tremendous impact over the process of teaching, which spreads among the 'level of acquisition of knowledge and skill' of the student too *[Biswas & Roy, 2004]*.

6.1. Rethinking Teacher Education

Human resource management (HRM) is mere a utopia until and unless human resources are 'developed' by processing existing population through 'appropriate' education and training. The task mostly stands with the system of education. To run the system effectively, it is essential to have a standard reservoir of teachers. Within the sphere of education, responsibility to develop well-equipped teacher is assigned to 'Teacher Education System' *[Roy, et. al, 2004]*. As such, it is the most important factor; often influence the process of human resource management (HRM) within the paradigm of a given social set up, especially in the so-called developing nations like India.

Since its inception, formal programmes of teacher education in India perused sequential changes in course of time. Such changes took place mostly in the 'forms' as well as in 'content', keeping in view the need of Indian society and cliental groups, for whom the programmes were made. In consonance with changes in society at large and in the sphere of education, in specific, educational and training programmes for teachers accorded modifications. Some specific changes are suggested to enhance effectiveness of existing teachers' training programme to well-address the needs of the society in the present juncture of time with a view to develop human resources, and society as well.

6.1.1. Teacher Education Defined

Teacher education may be defined as the formalized activity to induct the very group of professionals, either involved in, or desirous to be the professional group to pursue their livelihood through teaching. As such it comes under the very domain of professional education. Education, as stands for a much broader connotation, therefore instead, with a view to enhance the potentiality to successfully perform in the specified profession, much emphasis needs to be placed over imbibing skill in relation to the profession *[Roy, 2002]*. Therefore it is judicious to supplement the word 'education' by 'training' as the latter is much focused over the activity of generating skill.

6.1.2. Teaching- The Profession Verses Mission?

The controversial and much debated issue stands in the way of Indian educators, whether teaching needs to be considered as a profession or be taken as a mission? Our history of Indian education advocates it to be keen to mission, where much emphasis was placed over developing affective domain of learning, apart from cognitive development. In course of time, however a paradigm shift has taken place over psychomotor domain, than to affective one. As such we need to keep a judicious focused attention over the very debate and should not try to sail against the tide of the present day.

6.1.3. Can Teacher be 'Produced' Through Training?

This very pertinent question needs an immediate answer in view of day-to-day deterioration in the frame of instruction. As is felt, for proper and optimum use of human resources, teachers need to be trained properly so as to enable them to transmit their duties

and responsibilities in the real work situation. Unfortunately, whatever existing trend reveals is not be considered as absolute-desirable [18].

6.2.0. What the Teacher is expected to Perform?

Basic task of a teacher is to act as a bridge between the student and the curriculum, which, in course, reflects from the output of the system, i.e., the students. As such, variety of curriculum is the basic intervening factor that needs to be taken in to consideration while imparting instruction. More efficient the teacher is in doing the sequel of function, better the teacher is *[Reynolds, 1990]*. So far the methodology of teaching is concerned, a uniform approach at every level of instruction will not give expected result. Specialized approach is therefore essential. Prevailing concepts in relation to higher education in our country – 'teachers don't require training'- needs to be changed. As such, in the very inset of entering in the profession, training needs to be considered as a basic prerequisite. To address the issue the immediate question arises is irrespective of levels and types, what teachers use to do? Teachers use to teach the students. Those who are having much affinity with western pedagogic concept will say to help the learner to learn. In course, teacher helps the learner to KNOW about FACTS/PHENOMENON, those can be observed or experienced. Teacher helps the learner to guide to THINK CRITICALLY, CREATIVELY and PRACTICALLY. These thinking rest on ideas, which require explanation and prediction in an interpretative perspective from the teachers end initially, and also from the students.

For understanding and shaping one's self, ideas, facts, phenomenon and concepts supposed to be interconnected by identifying similarities and finding interaction. Here the task of the teacher is to help the student to CONNECT all those.

Teacher should be well equipped to help the students in understanding and interacting with others. These may be termed as ACTING WITH SOFT SKILL, which should cover PHYSICAL, INTELLECTUAL and PSYCHOLOGICAL AWARENESS about the learning environment.

Finally in the process of learning, teacher is to be CARING enough towards the students in terms of FEELINGS, INTEREST AND VALUES.

6.3.0. Skill- The Underling Factor

The dictionary meaning of the word skill refers to expertness, a craft, or accomplishment. A skill is the capacity to perform a task competently. In teacher education, as like in technical and vocational subjects, skill development is a part of curricular experiences. Skill development comes under psychomotor domain. Here learning-outcomes hinge on motor skills, which require the ability to carry on (manual) works. Teaching is expected to be based on the three basic skills as follows:

Manipulative skill → Hands on practice
Observational skill → Capacity to observe
Drawing skill→ Capacity to draw.

6.3.1. Basic Skill

We read, - we forget
We see, - we remember
We do, - we understand.

While the manipulative skill requires the ability to handle and keep the equipment properly and follow precautions during handling with equipments, observation skill demands recording the observations faithfully, assessing activities with accuracy, and to deduce inferences correctly. In skill training, deliberation of the content will be such so that the student should fill the urge to learn the skill. There should be specification about time and accuracy to perform certain job. Apart from these, safety rules should be strictly followed. The concept of skill development is based on 'Learning by doing' as well as on 'hands-on-practice'. Active involvement of the learner in the process is essential. Skill refers to a physical, mental or social ability that is imbibed though practice, repetition and reflection; and in which it is probably always possible for the individual to improve upon the skill.

6.3.2. Developing Skill in Actual Environment

Existing teachers' training, as often said, has become much more theoretical. In these training, on one hand, scope of 'practice' is inadequate; on the other hand, existing scope of practicing-teaching is not well utilized, which is mostly caused due to over-mechanization of practice. Justification of practicing-teaching thus becomes a futile exercise for the trainee. Actual classroom/institutional condition is often ignored. The tendency needs to be changed.

6.3.3. Why Skill Learning?

Now a days it is felt by the Indian government the need to implement a systematic approach to develop highly qualified and skilled human resource for the overall development of the economy and standard of living of the countrymen. Parallely it is necessary to develop skilled management of human resources. Both these developments can be facilitated by a wholehearted commitment at employer and employee level to acquire skills in the recognition and assessment of prior and experiential learning as a means of providing effective human resource management.
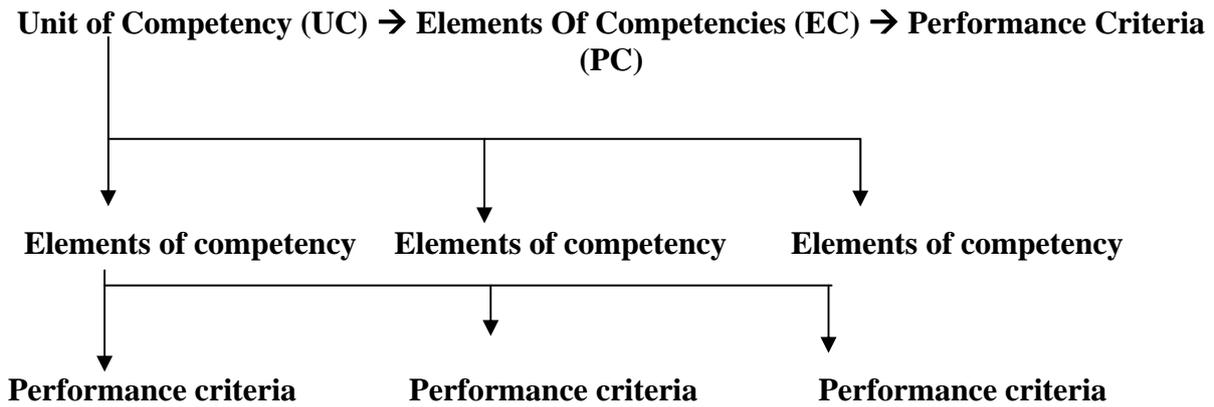
6.4. Assessment Defined

The usual meaning of the word assessment is to estimate the size, quality, amount or value of certain thing(s). However in educational perspective the word assessment connotes the level of acquisition of knowledge or skill about certain content or task, which is mostly psychological or behavioural in nature. While measurement or evaluation takes place in estimating the potentialities of an individual related to his/her cognitive domain, assessment is related to the estimation of capabilities involved with affective and / or psychomotor domain.

6.4.1. Assessment of Teaching Skill

The system or the methodology of skill learning supposed to be followed by a systematic sequence. Skill components require to be specified in terms of 'unit competency' abbreviated as UC and further classified in 'elements of competency' and 'performance criteria' abbreviated as EC and PC respectively. While assessing the skill, the basic consideration for the assessor should be, whether the trainee has achieved the performance criteria or not. There is no further scope, neither to qualify nor to quantify the performance criteria, as it is pre specified at the stage of identification.

Considering teaching a skill, teacher educators need to give a second thought over the existing practice of assessing a 'trainee'. Almost each and every hand should accept it that in final teaching sessions, the method of assessing 'teaching-skill' of the trainee is not well judged. Difference of marks assigned by different evaluator to a specific trainee in a specific session is most common phenomenon, where offering an average of marks is usual practice.

Unit of Competency (UC) → Elements Of Competencies (EC) → Performance Criteria (PC)

Elements of competency	Elements of competency	Elements of competency
Performance criteria	Performance criteria	Performance criteria

Experience reveals, assessing skill, which is supposed to be a continuous process, is hardly assessed continuously. As such, 'effective' and 'agreeable' feedback from the assessor to the trainee is a rare phenomenon. Even sometimes situation appears, where assessors themselves are not in agreement while assessing certain skill. All these occur due to our reluctance to develop a standard list of 'performance criteria' in relation to teaching at various levels and subjects. Availability of such subject and level specific list of 'performance criteria' will surely help us to assess teaching skill in a more objective manner.

6.5. Recognizing Technology

Emergence of new technology in the process of imparting information has changed the teaching of the day. Power-point-presentation, graphic-art-designing, animation-effects over slides, programmed instruction are some of the new forms of technology. Today's' teacher, as often argued, has become a more learning assistant, with these techno-devices. If the technological devices really help (and techno-devices often help) to comprehend the concepts, facts, knowledge, obviously those will be utilized. Assuming an ideal situation of availability of modern technological gadgets, 'trained teachers' are suppose to be familiar with the application of such devices, not just only out of interest, but as a compulsory component of teacher-education curricula, preferably in an integrated way, without introducing a new subject-paper. Does our existing curriculum offer such scope to our trainees?

The need of the day is to offer method subjects/ papers orienting with IT applications to enable trainee to apply the knowledge of IT oriented teaching in his/her professional setup.

6.5.1. Technology- Is It a Threat to Teachers?

On contrary, irrespective of levels and types, the basic task of teacher is to teach the student. Those who are having much affinity with western pedagogic concept will hold, 'to help the learner to learn'. In fact, the task of teacher is to help the learner to KNOW about FACTS/ PHENOMENON those can be observed and experienced. Teacher is supposed to help the learner to THINK CRITICALLY, CREATIVELY and PRACTICALLY. Those thinking rest on ideas, which often requires explanation and prediction in an interpretative perspective from the trainer initially, and also from the trainees.

For understanding and shaping ones' self, ideas, facts, phenomenon and concepts supposed to be interconnected by identifying similarities and finding interaction. Here the task of the teacher is to analyze and synthesize and thereby RECONNECTING all those in a gestalt fashion. No technological devices have yet been invented to perform the task, on behalf of the teacher.

6.6. Assessment of Prior Learning (APL)

Trainees are mature enough and possess substantial knowledge. However it is often observed that PRIOR-KNOWLEDGE of the trainee is hardly taken into consideration while offering training programmes and a sizable proportion of resources and energy is wasted in almost entire span of training. The trend needs appropriate rectification through assessment of prior learning at the very outset of the training to minimize the wastage of resources in various forms in teacher-education programmes.

6.7. Soft Skill

Teachers should be well equipped to 'understand' students, and also to help them in understanding and interacting with others. These may be termed as ACTING WITH SOFT SKILL, which covers PHYSICAL, INTELLECTUAL and PSYCHOLOGICAL AWARENESS about the learning environment. Irrespective of possessing 'sufficient teaching skill', the trainee cant be a good teacher until and unless s/he acquires these soft skill, which also incorporates enough CARING ATTITUDE towards students in terms of FEELINGS, INTEREST and VALUES. Teacher educators need to emphasis these aspects, which are hardly uttered in the curriculum, and even spelt out somewhere, rarely practiced in the teacher education programmes.

6.8. Postscript

Relevance of any programme largely depends upon its contribution towards contemporary society. In case of a 'subject of study', recognition for the subject is strongly tide with its' 'base discipline'. Therefore need of the hour is to make the existing teacher education programmes more need-based and demand-driven to enable it to hold command in the sphere of human resource management by catering the changing needs of the contemporary society and of the nation, failing which not only the programmes will loose their relevance in the process of HRM, but also will become ornamental. Simultaneously it is essential to strengthen the base discipline 'education' with a view to gain feedback for the enrichment of teacher education programmes in course of time.

Notes

1. In Indian universities, educational research mostly initiated in an interdisciplinary approach, where the outcome of such studies contributing theories and methodologies to allied disciplines much more, compared to education.
2. Data in this context are available in the website: www.education.nic.in, the official website of MHRD, Government of India.
3. The study was initiated with the financial support of Indian Council of Social Science Research [ICSSR], New Delhi, to bring up a doctoral dissertation abstract in social aspects of education.
4. Though the issue is much debatable, however well-recognized by the stalwarts in Indian higher education.
5. Data in this context are explored from the reportings depicted in *'The theses of the month'* columns, periodically published by Association of Indian Universities, New Delhi in its journal 'University News'.
6. Apart from human resources, as Professor Sen perceives, economic stability helps in maintaining congenial climate, within which fruits of self-sufficiency ripe.
7. Development depends upon four basic components- viz. Independence, cooperation, enhanced skill and growth in production rate.
8. Most of these studies are carried out in the disciplines- Economics and International Relations.

9. Though literacy is one of the major indicators of formal education, however it cannot be considered synonymous with education.
10. 'Welfare-Economics' stressed the very concept.
11. Among many others, gross domestic product is a component of economic-index, which estimates human development.
12. Please refer to world development reports.
13. History of colonial East advocates the fact.
14. Two major countries in the region -China and India hold a sizable proportion of world market.
15. Though data in this context is yet to get a published form, however trend of existing data, pooled by the author (as a member of a small group), establish the fact.
16. Such attempts of expansion of technical education without proper manpower survey drastically reduced the per capita potential earning of newly graduate engineers since last eight years [i.e., 1998 onwards].
17. Please refer to World Development Indexes.
18. Experience reveals the fact.

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