

JPJRS 14/1 ISSN 0972-33315, January 2011, 5-39

DOI:10.5281/zenodo.4269370

Stable URL: <http://doi.org/10.5281/zenodo.4269370>

Methods And Models Of Education: Reflections On Re-Visioning The Teaching-Learning Process

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Abstract: The primary goal envisaged in this paper is to introduce some models of teaching and learning, and their accompanying theories of education, with a view to initiating creative thinking in the field of pedagogy, especially regarding philosophy and theology in seminaries. A holistic model of teaching and learning is proposed which includes the six dimensions of thinking and learning, and the five levels of awareness and experience.

Keywords: Models of education, theories of education, philosophical-theological teaching-learning, holistic model of pedagogy, spiritual level of awareness.

Introduction

Methods of teaching and learning constitute a complex field of research that involves theories of learning, models of education, pedagogy or methods of teaching, methods of evaluation, understanding the student profile, awareness of the prerequisites for learning as well as other areas such as syllabus, curriculum design, and resources. However, very little time and energy is spent in our theological and philosophical institutions on the question of methods of teaching and learning. In practice, professors in the faculties of philosophy and theology engage in the teaching and learning activity without any conscious knowledge of the theories of education that are implicitly present in their very activity. Bringing some of these

theories into our conscious awareness could help us revision and improve the quality of our teaching and learning process.

Understanding ‘Method’

The term ‘method’ is ambiguous. When applied to the process of teaching and learning, it can be understood in two ways. First, it could mean the concrete ways adopted or steps taken in the teaching and learning activity. For instance, a teacher may employ the lecture method, the methods of lecture cum discussion, small group discussions with presentations, seminars, power point presentations, field studies, debates, panel discussions, participant observations and exposure program in his/her teaching and learning process. These are teaching methods in the sense that they are concrete steps taken or tools employed in order to achieve and realize the goal of education.

Second, ‘method’ could also be understood more abstractly as the assumptions, presuppositions, visions and goals of the total process of teaching and learning. In this sense, it stands for the theoretical structure or the conceptual framework of the teaching and learning activity. This structure or framework provides the rationale for the pedagogy used for the educational purpose. In reality, pedagogy evolves from the conceptual framework with which an educator operates and, hence, an analysis of one’s pedagogy will unveil the theories of education on the basis of which the teacher is functioning. That is to say, method as understood as the structure or theoretical framework is seldom present in the conscious awareness of the teacher unless he/she is formally introduced to the theories of teaching and learning.

The primary focus of this paper is on method understood in its second meaning. The reasons for giving priority to the second understanding of method are the following: First, there is much chaos created in our discussion on improving the teaching methods on account of confusion caused by the mix-up of the two different understandings of method. Second, we often talk about pedagogy focusing exclusively on the first meaning of method and give little attention to the models of education or the theories of teaching and learning. As a consequence, we fail to make any headway in improving our pedagogy. Third, we are unaware that a specific pedagogy is built on a particular theory of education. It implies that one's conception of pedagogy differs from others depending on the underlying theories of education one has. It is important, then, that a certain level of consensus on the theories of teaching and learning is ensured before we can meaningfully talk about pedagogy. Finally, there is an immediate and urgent need to introduce new pedagogies into our teaching and learning process. For this, it is necessary to begin with some of the theories of education, because new pedagogies presuppose new theories of education. In other words, any significant change in the pedagogy is predicated upon our conceptual framework for teaching and learning.

From this perspective, the primary goal envisaged in this paper is to introduce ourselves to some of the models and accompanying theories of education with a view to initiating creative thinking in the field of pedagogy or methods of teaching. The assumption behind this is that familiarity with the models and theories of education as well as some of the theories of learning may prove to be of immense help for us to revision our pedagogy, our

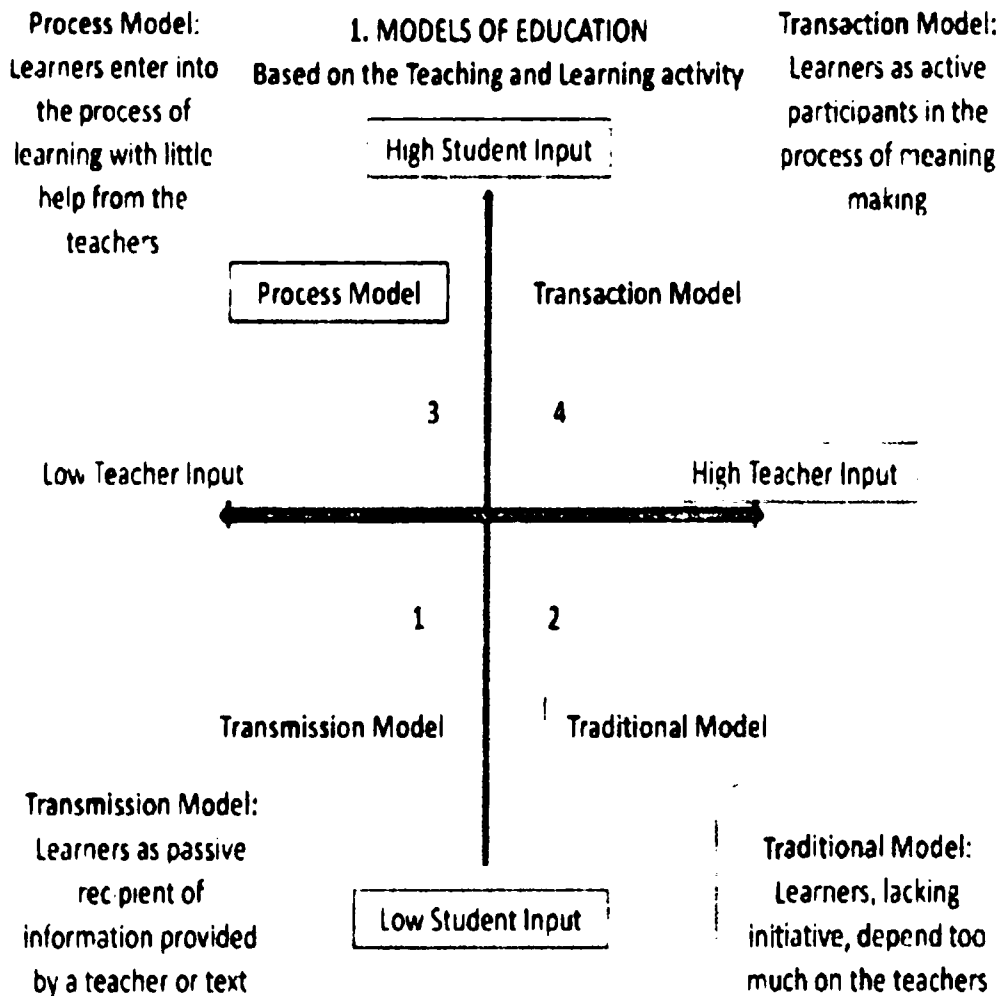
syllabus and curricula, and the process of assessment and evaluation. Accordingly, I shall discuss the four basic models of education and the various models that derive from them. While discussing these models, I offer a brief critical assessment of the teaching and learning processes that go on in our philosophical and theological institutions and suggest some of the crucial elements that need to be incorporated into our educational process. In conclusion, I shall highlight some of the insights that can be utilized for improving the methods of teaching and learning.

I. Models Of Education Based On The Teaching And Learning Activity¹

The educational model based on the teaching and learning activity in the classroom classifies the process of teaching and learning on the basis of the levels of the teacher input and the student input. Accordingly, this model generates four different sub-models. A grid could help understand the sub-models that emerge². Here the teacher input is placed on a horizontal axis which marks a continuum from low teacher input to high teacher input. Similarly the student input is placed on a vertical axis representing a continuum from low student input to high student input. This generates four quadrants representing four sub-models of education.

¹ For this section I am indebted to Doug Noon, "Models of Education: Overview". Accessed 5 November 2010. Available from <http://borderland.northernattitude.org/2005/12/13/models-of-education-overview/>

² The graphic is adapted from Lucy Calkins as presented in Doug Noon "Models of Education". I have elaborated it to serve the purpose of this article.



Quadrant I: Low Teacher Input and Low Student Input. The quadrant one (1) is characterized by minimum classroom activity from the side of both the teacher and the student. This is called the Transmission Model. In this model, students remain as passive recipients of information that the teacher imparts. The educational process depends heavily on lectures and class notes, prepared notes and reading material, and very limited and restricted student responses. As a consequence, a minimum is taught, a minimum is learned. The teacher is happy because there is hardly any demand on the teacher; the student is happy because not much effort is needed to learn the minimum that is taught. The student evaluation

places emphasis on the student's ability to memorize what is taught. Since there is not much to memorize, it is possible for all students to perform well and score high marks in the examination. In the teacher evaluation, it is very likely that the teacher would be rated high since students easily understand the minimum that is taught, and especially so if he/she has a good sense of humor and has good communication skills. In an atmosphere that encourages high criticism of teachers that could endanger their teaching career, teachers may be tempted to adopt this model as a survival mechanism.

Quadrant II: High Teacher Input and Low Student Input. The second quadrant is marked by high teacher input and low student input. It is called the Traditional Model. Like the previous model, this model is also marked by passive learning and the educational process follows a similar pattern. However, there is one major difference, namely, that the teacher in this model is more active than in the previous case. This model can also be called the "banking model" because the teacher's primary function is seen as 'depositing' his/her knowledge into the students and the student's role is to take in what is deposited. The teaching method may include prepared notes, dictated notes, extensive use of blackboards, and/or power point presentations. Here the demand on the teacher is high. However, the student's capacity to think is stifled. Since the teacher does the thinking, the student is discouraged from thinking. This will contribute to the frustration of the intelligent students who place a premium on thinking. Students could perform excellently well solely by memorizing the content of the elaborate notes painstakingly prepared by the teacher. In the teacher evaluation students who have a penchant for gathering

information (a majority of our students prefer this to independent thinking!) may rate the teacher high.

An Observation: In most of our philosophical and theological institutions we still operate according to models represented by Quadrants I & II. The teacher is concerned with giving more and more information to students. The role of the student is to “know” the information given and to reproduce it from memory. The focus of evaluation is to determine the amount of information the student has gathered in the process of attending a course. If the teacher and the student are operating with these models, it would be nearly impossible to bring about any substantial change in the teaching and learning process. No further explanation is needed to ascertain what our institutions stagnate!

Quadrant III: Low Teacher Input and High Student Input. The third quadrant, which is called the Process Model, is characterized by low teacher input and high student input. Within this model students enter into the process of learning on their own without much assistance from the teacher. This model may be appropriate for highly motivated self-starters as it gives them ample opportunity to study and do research independently. However, the average student will be in the lurch as they are deprived of their primary source of learning. Even the intelligent students would experience the deprivation since they lack the much needed feedback from the teacher as well as the opportunity to benefit from the teacher’s knowledge, experience and guidance. As a consequence, they may not make as much progress as they could have made with the help of the teacher.

We find, in our institutions of philosophy and theology,

students who fall into the category of self-starters who are normally highly intelligent and capable. They might find the normal classroom activity inadequate and frustrating. If our teaching and learning activity is not going to rise to the level represented by the Fourth quadrant, then, it is important to identify the self-starters in the group and to offer them the needed assistance by way of feedback and guidance to do independent study and research. This is particularly important in large classroom situations.

Quadrant IV: High Teacher Input and High Student Input. The specific marker of the fourth quadrant, called the Transaction Model, is the high input both from the teacher and the student. In this model both the teacher and students are actively involved in the teaching and learning process. Both are fully engaged in and committed to the principle of participatory learning in which students as well as the teacher are beneficiaries since both teach and both learn. Accordingly, the responsibility for learning and making decisions is shared by the teacher and students in their differing capacities.

The Fourth quadrant represents the ideal scenario of teaching and learning from the perspective of the model we are discussing. Here the process of teaching and learning operates on the basis of a contract between the teacher and students. The function of the teacher is to facilitate the learning of students and students take responsibility for their learning. This responsibility is vested solely in the students and it is not to be transferred to the teacher. If such transference occurs, it will pave the way for high teacher criticism which must be perceived as a camouflage for the students to debunk their own responsibility for learning. Encouraging such a tendency and making it a pattern of students' academic life in our

institutions may be counterproductive in the long run as it encourages among teachers a corresponding tendency to seek cheap popularity by awarding high marks in examinations and to avoid criticism by means of adopting the model of teaching as represented by the first quadrant. This is becoming more and more a curse on our philosophical and theological education.

In addition, the model represented by the fourth quadrant is difficult to achieve precisely because the teachers in the institutions of philosophy and theology are disadvantaged on three accounts: first, they inherit the methods of teaching and learning as represented by quadrants I and II that are prevalent especially in the Indian educational system and they find it difficult to transcend the inherited models. Second, they have no formal learning in the theories and principles of education as required of ordinary primary and secondary school teachers. And third, the students they are dealing with are trained according to the models of the first and second quadrants. Therefore, teachers face a constituency that refuses to change over to any other model because they are unwilling to face the demands of the change. In addition, inadequate emphasis on accountability, lack of motivation and incentives make the situation worse. In my opinion, if we could adequately respond to the first two disadvantages, the handling of the third disadvantage would be easier.

II. Models Of Education Based On The Outcome Of The Teaching And Learning Process³

³ The reflections in this section are based on Robert Freeman, "Competing Models for Public Education: Which Model is Best?" Accessed 7 November 2010. Available from

The first model based on the teaching and learning activity in the classroom is foundational and is applicable to the remaining three models of education because the teacher and the student inputs are basic to every type of educational process. It would suffice, however, to keep it in mind while discussing the other models. The models of education based on the outcome of the teaching and learning process consists of two subsidiary models, namely, the factory or industrial model and the womb model. The focus in both models is on the intended outcome or the end product of the educational process.

1. The Factory or Industrial Model

This model is particularly promoted by the corporate world that needs professionals to run the various departments of the corporation. In our institutions this model gets valorized when the church itself is seen as a big corporation in need of professionals. When this happens, the philosophical and theological formation moves in the direction of a factory model. Accordingly, the institutions of philosophical and theological learning become factories or industries and the process of education assumes the nature of a mechanical, industrial process. Just as a car is fabricated in a factory, a church professional is fabricated in our institutions. Just as the process of producing a car begins at the beginning of a conveyor belt and comes out as a finished product at the end of the conveyor belt so also a church professional begins to be formed in the minor seminary or pre-novitiate and comes out as a finished product at the end of the conveyor belt of years long formation. From this perspective, the student is looked at as a factor of

production to be assembled and put to work. A student who does not think and who does not ask critical questions would be considered as material of the best quality. The purpose or goal of the educational process becomes no more than the mass production of 'factors of production' to be used for the manufacture of wealth/goods (services). The teachers are like industrial robots that produce well-trained products with competence, especially with the excellent qualities of submissiveness and total inability for critical thinking. Their competency is judged on the basis of their ability to produce professionals as required by the managers to run the corporation. For this purpose, the content (what is to be taught) and method (how it should be taught) are dictated to them and seldom are they given the necessary freedom for curriculum design.

According to this model, the purpose of reform and renewal of the educational process would be to make the institution more machine-like; production more mechanical; and products more 'efficient'. In order to achieve this goal, emphasis is often given to greater standardization and stricter regimentation. The ultimate consequence of such standardization and regimentation would be the total dehumanization of education itself.

This model in its starkest form may not be present in our philosophical and theological institutions. However, the restriction of the freedom of research and expression imposed on the teachers and, to a limited degree, on the students, and the constant supervision of the content and process of education with the help of 'invisible hands' point to the direction of a factory model of education. Moreover, the quality of the end products judged with the measure of personal conviction, initiative, creativity and commitment, and seeing the conspicuous lack of these

qualities, one may be justified in thinking that the product is coming out of a conveyor belt. Further, the evaluation system focusing more on awarding marks for information reproduced than on personal transformation in terms of developing strong convictions, perspectives and commitments also may testify to a machine-like production process in our institutions.

2. The Womb Model⁴

The womb model of education has great relevance for the life of the church. Here the church is understood as a community that needs nurturers rather than a corporation requiring professionals. Accordingly, school and education are viewed as a place the process of birth takes place – birthing a new generation of priests and religious who will carry forward the culture of the community. Here students are seen as human beings to be nurtured rather than machines to be fabricated. They are nurtured and set to thinking so that they may become agents of ecclesial and social regeneration. In conformity with this view of the student, the purpose of education is envisaged as individual cultivation of human maturity in order to give birth to thoughtful human beings who will embody and model the church's values for succeeding generations. Here the role of the teacher becomes delicate and challenging. They are seen as nurturers of human persons and midwives of a new generation of thoughtful priests and religious. This model of education also envisages the need for reform and renewal. However, the purpose will not be to make the educational process more mechanical and products more efficient. It will rather be to create

⁴ Robert Freeman uses the phrase 'Cultural Womb Model'.

space for personal growth; to promote individual initiative and freedom and to facilitate the generation of agents of ecclesial and social transformation.

The womb model of education, as mentioned earlier, has great significance for the church in India, especially because the church itself is considered as the Mother of the faithful. If the church is mother, then her primary function is to nurture and promote life. Priests and religious are people who are specially called to participate in the nurturing function of the church and, therefore, the institutions of philosophy and theology have the responsibility to create nurturers who are capable of giving witness by embodying the true nature of the church. This can be achieved only if teachers themselves become nurturers with the required competency to assist the birth process of a new generation of priests and religious. This does not rule out the need for professionals since the church is also an institution. The real problem emerges when the professional aspect overrides the nurturing dimension of the educational process. In fact, this is happening in our institutions under the impact of globalization where efficiency and professionalism is valued at the expense of everything else. The church values professionalism and efficiency, but it ought to value the nurturing dimension more and create in her professionals the ability to become nurturers. Accordingly, the process of reform and renewal of our institutions of philosophy and theology need to aim at transforming them into places of rebirth and regeneration, the teachers into nurturers and midwives of a new generation of priests and religious and students into embodiments and carriers of the values of the church for future generations.

III. Models Based On Orientations To Learning⁵

While the focus of the first models was on the teaching and learning activity in the classroom and that of the second on the outcome of the educational process, the emphasis of the third models fall on the learning theories and particularly on orientations to learning. Here learning is viewed not as a product in terms of acquiring knowledge, skills, methods and the ability to apply them to various circumstances of life. If we look at learning as a product – the outcome of a process – then learning becomes 'external to the learner. Rather, in the third models learning is seen as a process of change and transformation and, hence, learning as internal to the learner. It is different from the models represented by quadrants One and Two in the first models and from the factory model where learning is perceived as something the teacher does to the student. When looked at learning as a process, it is something that happens to the student as a consequence of the participatory teaching and learning process as represented by the fourth quadrant in the first model, and the nurturing of the persons as seen in the womb model of education. That is to say, there is something personal about the educational models based on orientations to learning.

There are four orientations to learning, namely, the behaviorist orientation, the cognitive orientation, the humanist orientation, and the social/situational orientation. Each of these orientations enshrines specific views of

⁵ The inspiration for this section comes from Smith, M. K. (1999) 'Learning theory. Accessed 13 November 2010. Available from *the encyclopedia of informal education*, www.infed.org/biblio/b-learn.htm, Last update: September 03, 2009

learning, the purpose of learning, the role of the teacher as well as the manifestation of this orientation in adult learning. These orientations to learning show various aspects of learning involved in the process of education which need to be taken into account.

1. Behaviorist Orientation to Learning⁶

View of the learning process:

The behaviorist orientation to learning views education as a process leading toward a change in behavior. The change is perceived predominantly as a function of the environment. More than the learner himself or herself, it is the elements in the environment that are considered to be decisive for what one learns. Therefore, the behaviorist orientation to learning gives great importance to the environment of learning in the process of learning that leads to the formation of habits indicating changes in behavior. However, the behaviorist orientation in its emphasis on the environment tends to overlook other factors in the learning process which the other orientations highlight.

Purpose in education:

Consonant with the view of learning as a process, the purpose of learning is conceived as producing behavioral changes in the desired direction. Knowledge and theory have no relevance in themselves. They are significant insofar as they help bring about changes in behavior.

⁶ Discussions in this section are based on Smith, M. K. (1999) 'The behaviourist orientation to learning'. Accessed 2 January 2011. Available from *the encyclopedia of informal education*, www.infed.org/biblio/learning-behaviourist.htm. Last update: September 03, 2009.

Educator's role:

Accordingly, the role of the teacher is to arrange the environment to elicit the desired response. The learning environment needs to be such that it makes learners active rather than passive. For the behaviorist orientation to learning presupposes that activity is important for learning to take place. Moreover, constant practice is also a necessary element for effective learning. Together with repeated practice, there is also the aspect of positive reinforcement by way of rewards that plays a significant role in the learning process. Finally, to better facilitate learning, the objectives of learning need to be made clear to the learners. In these ways the teacher creates and arranges the environment for learning and facilitates behavioral changes.

Manifestations in adult learning:

Since in the behaviorist orientation to learning the emphasis is on the outcome of the learning process in terms of behavioral changes, the learner manifests one's learning in effecting behavioral objectives, especially the desired changes in behavior. Second, competency-based education focusing on developing capabilities to do things rather than merely having theoretical knowledge and skill development are other manifestations of behaviorist orientation in adult learning.

We shall now briefly look at the significance of the behaviorist orientation to learning for philosophical and theological education. Effecting change and transformation of behavioral patterns in the direction of an authentic Christian life is a central concern of our philosophical and theological formation. However, living in a society that is steadily becoming more and more

consumerist, it is undeniable that people tend to adopt consumerist values and patterns of life. Consumerism exercises a strong influence both on teachers and students in our institutions. This is the environment of our education and it leads our students to adopt behavioral patterns contrary to what is desired and intended by our educational process. The primary question for us educators at this juncture is: what should be the nature and characteristics of the environment in our institutions and how can we transform it so that our teaching and learning will effect change in our students in the desired direction of Christian values and patterns of life? This question highlights the vital need to pay greater attention to the behaviorist orientation to learning in our educational process.

2. Cognitivist Orientation to Learning⁷

View of the learning process:

The focus of the cognitivist orientation to learning is on the individual's internal mental processes including insight, information processing, memory, and perception. That is to say, it is concerned with cognition itself, namely, the act or process of learning. Learning takes place through inferences, expectations and making connections. From a cognitivist perspective, rather than acquiring behavioral habits as in the case of behaviorist orientation to learning, learners acquire the ability to make plans and strategies through the learning process.

⁷ The ideas developed in this section are based on Smith, M. K. (1999) 'The cognitive orientation to learning'. Accessed 2 January, 2011. Available from *the encyclopedia of informal education*, www.infed.org/biblio/learning-cognitive, Last update: September 03, 2009.

Purpose in education:

From the perspective of cognitivist orientation, the purpose of education is to develop capacities and skills to learn better. Behavior, tasks and skills need plans and strategies to put them into effect in actual practice. It is the primary function of education to provide the ability to plan and develop strategies to execute tasks which come from the knowledge acquired through the process of learning.

Educator's role:

The primary role of the teacher envisaged in the cognitive orientation is to structure the content of the learning activity. This role of the teacher takes into account some of the key principles of the cognitivist orientation to learning. They include the need for the teacher to organize the instructions well because well organized material can be easily learned and remembered. The cognitivist orientation requires the teacher to clearly structure the instruction taking into account that the subject matter itself has inherent logical relationships among key ideas and concepts that link the parts together and it is the responsibility of the teacher to explicate these relationships. The teacher also needs to be aware of the knowledge level of the learners so that new learning can be incorporated into things that are already known by students. This presupposes that there are differences in individual learners. Finally, the teacher needs to give cognitive feedbacks, that is, providing information about the results of learning. This will reinforce the learning process. In this way, the teacher plays a constitutive role in the cognitive orientation to learning.

Manifestations in adult learning:

In adult learning, the cognitive orientation to learning is

manifested in the cognitive development of the learner which includes development in the internal mental processes such as insight, information processing, memory, and perception. The growth in intelligence is manifested in the ability of the student to make inferences and to establish connections among key ideas. In the practical realm the student will show competence in making plans and strategies for achieving the desired goal.

The cognitive orientation to learning has great significance for our philosophical and theological education. What we witness at present in our institutions is an increasing disdain for intellectual excellence. It is evident in the overemphasis given to extracurricular activities in our institutions, often at the expense of the academic side. Sports and games, musical and cultural performances, various competitions, celebrations, program and shows, and pastoral and social activities easily substitute serious academic activities. The teaching and learning itself is approached as a burden helplessly borne and as a necessary evil to be patiently endured. The tragedy is that even the educators seem to encourage and promote this view by lowering the standards, relaxing the demands, and rewarding mediocrity, thereby enabling students to perform well in the examinations even without any serious application to study.

While this is happening in our institutions, the secular world throws up challenges and questions from varied fields starting from the religious, socio-cultural, economic and political, environmental spheres and reaching up to the most challenging fields of science and technology. Often the questions coming from secular fields have a direct bearing on our faith. And yet the priests and religious who come out of our institutions find themselves

inept in facing these questions and responding to these challenges. Helplessly settling for simplistic answers learned in earlier catechism classes becomes the only pastoral option for many as a result of the neglect of intellectual and academic excellence.

In the emerging situation, it is incumbent upon our philosophical and theological institutions to ensure that the cognitivist orientation to learning is given adequate importance. They should do this knowing that the pastoral ministry is not narrowly limited to what our students understand and that it involves much wider and complex areas than preaching, teaching catechism, conducting choirs and administering sacraments. Pastoral ministry in the modern world calls for adequate intellectual preparation as emphasized in the cognitivist orientation to learning.

3. Humanist Orientation to Learning⁸

View of the learning process

In the humanist orientation to learning, the stress is neither on the change of behavior nor on the mental processes that go on in the learner, but on the potential for human growth. Rather, the process of learning is seen as a form of self-actualization of the whole person which is considered as the highest good desired in the learning process. Learning is approached as a personal act to fulfill one's potential. In the humanist orientation the learning process engages the whole person with his or her

⁸ This section is developed with the help of Smith, M. K. (1999) 'The humanistic to learning'. Accessed 2 January 2011. Available from *the encyclopedia of informal education*, www.infed.org/biblio/learning-humanistic.htm, Last update: September 03, 2009

experiences. As a consequence, the humanist approach to learning combines the logical and the intuitive, the intellect and feelings. The critique of the humanist orientation to learning is that it tends to be narrowly individualistic and self-centered.

Purpose in education:

In conformity with the humanistic vision of the learning process, the purpose of learning is perceived as becoming a self-actualized person. Self-actualization is understood as the capacity to make full use of and give full expression to one's talents, capabilities and potentialities. Self-actualization also entails becoming autonomous persons not in the sense of having no social responsibility but capable of fulfilling the social obligations without losing one's own integrity or personal independence. The social existence of the self-actualized person need not necessarily limit one's horizon as not to see other possibilities of self-actualization. If necessary, he/she may be also prepared to transcend the socially prescribed ways of acting in order to reach one's full potential as a human person.

Educator's role:

The teacher's role is limited solely to facilitating the development of the whole person. It implies that the teacher should ensure the personal involvement of the whole person. That is to say, the feeling and cognitive aspects of the person needs to enter into the learning process. The teacher may provide external impetus or stimulus; however, he/she should realize that learning is self initiated and that understanding and comprehension come from within the learner. Similarly, the teacher should be conscious of the fact that learning could exert

influence on the behavior, attitudes and personality of the learner and make a difference. However, it is the learner's responsibility for this to happen. Furthermore, it is important to know that in this approach the learner is also the evaluator. The teacher could assist the learner to see whether the learning process meets the needs of the learner and provide the necessary help to achieve what the learner wants. And, finally, the teacher should realize that the essence of learning is making meaning for one's life and, therefore, the teacher should make sure that meaning is built into the whole experience of learning.

Manifestations in adult learning:

The primary manifestation of the humanistic orientation to learning is in the sphere of self-directed learning. The adult learner knows what he/she wants and takes the initiative to get fully involved in the learning process and ensures that he/she achieves the goal one sets for oneself. It is in the self-directed learning that one manifests one's journey toward self actualization.

The humanist orientation to learning could shed light on certain ambiguous areas of our philosophical and theological education. Often questions are raised about the appropriateness of philosophy and theology professors being considered as formators. It is argued that the job of professors is to teach and the formation should be delegated to a different agency called 'the formators'. The humanist orientation to learning shows that personal growth and actualization of the self are strong components of education. Teaching and formation constitute two inseparable sides of the whole teaching and learning process. The responsibility to facilitate the personal development of students through their teaching is vested

on the teachers. This makes it clear that teaching cannot be confined to transmission of information but also includes the inculcation of the formative value of the subjects taught. For this, the teachers themselves would have to personally experience and live those values inherent in the subjects. In other words, witnessing by life is integral to the teaching and learning process. Teachers, by giving witness to a Christian way of self-actualized life by their pattern of life, facilitate the self-actualization of students. The humanist orientation to learning needs to take this direction in our institutions of philosophy and theology.

4. Social and situational orientation to learning⁹

View of the learning process:

From the perspective of the social/situational orientation to learning, the process of learning is situated in the context of social relationships, in situations of co-participation. Learning takes place through interactions/observations in social contexts. Here the focus is not on cognitive processes and conceptual structures but on social engagements that provide the context for learning. Learning is seen as a process of social participation and, hence, participation in communities of practice is essential for learning to take place. People often begin learning at the periphery of a community and gradually move to the centre of a community of practice. The increasing participation in the communities of practice is seen as authentic learning and it involves the

⁹ The basic ideas for this section are borrowed from Smith, M. K. (1999) 'The social/situational orientation to learning'. Accessed 2 January 2011. Available from *the encyclopedia of informal education*, www.infed.org/biblio/learning-social.htm, Last update: September 03, 2009.

whole person acting in the community and the world. The social/situational orientation emphasizes the situated nature of learning. Learning is always contextualized.

Purpose in education:

In the context of a relational view of persons and learning, the purpose of education is understood as full participation in communities of practice and utilization of resources. Since the social orientation to learning does not envisage learning as acquisition of knowledge and information by individuals, but as a process of participation in the socio-cultural practice of the community, the purpose of education is to enable persons to become full participants in the community and through the community to engage in the world.

Educator's role:

As both the vision and purpose of education underscore the centrality of participation in a community of practice, the teacher's role in the learning process is to work to establish communities of practice in which conversation and participation can occur. The teacher needs to explore all possible avenues with people in communities to ensure that all are accorded full participation. The teacher should be especially sensitive to the power relations existing in communities that might prevent some from becoming full participants in the socio-cultural practices of the community.

Manifestations in adult learning:

The social/situational orientation to learning is manifested in the degree of social participation of the people. High levels of participation and engagement would indicate the depth of one's learning. Moreover,

since learning is not the private possession of individuals but an integral part of various conversations in a community, adults give expression to their learning by becoming partners in conversation at various levels.

While discussing the significance of the cognitive orientation to learning the tendency to overly engage in extracurricular activities was exposed and critiqued as an excuse to evade the demands of academic excellence. The social orientation to learning, on the other hand, reveals the significance of social and pastoral involvement for the teaching and learning of philosophy and theology. Students often complain about the irrelevance of what is taught in our institutions. The major reason for this complaint is the lack of orientation of our teaching and learning to the ecclesial and social life. Our philosophical and theological education has become decontextualized in the sense that it is unrelated to and irresponsible to the questions arising from our life situations. The teachers are excellent thinkers, no doubt, but their isolation from and lack of lived experience of the life-context of the people make their teaching insular and irrelevant. Students who often have much greater exposure and experience of the living conditions of the people bemoan the inability of teachers to link their teaching with the pressing issues arising from society.

Contrary to the current isolation of both teachers and students from the context of a living community, the social orientation to learning emphasizes the need for our teaching and learning activity to be concretely situated in the life of a community and learning to emerge from involvement and engagement in the life of the people. This specific orientation reminds us that authentic learning has to evolve from the interaction between the learning

activity proper and participation in a community of practice. Learning is not something done but it is something that happens in the interface of participation in social/ecclesial life and formal learning.

To conclude, teaching and learning are not to be guided by a single orientation. It involves multiple orientations and all are important. These orientations constitute the different components of the total educational process. The weakness of our institutions is that most of our teaching focuses on the cognitivist orientation and, as a result, it becomes, as we shall discuss in the following model, reductionist. This explains the fragmentation of our education. The challenge before us is to incorporate all orientations into our teaching and learning process.

IV. Models Based On The Dimensions Of Education¹⁰

The educational process is a very complex reality as it entails different dimensions of thinking and varied levels of awareness. If in the earlier times the approach to education was characterized by a simplistic concept, the complex nature of education is being acknowledged and accepted in the contemporary times. Based on the emphasis given to the dimensions of education, it is possible to classify education as conventional or unidimensional and holistic or multidimensional education.

a. Conventional Education (Unidimensional)

¹⁰ The discussion on holistic education is based on Ramon Gallegos Nava (2000) PowerPoint Presentation at the 8th International Conference on Holistic Education. Guadalajara, Mexico, November 2000. Accessed 16 December, 2010. Available from <http://www.ramongallegos.com/englishversions.htm#ancla2>

All of us are familiar with the conventional, unidimensional education since it was probably the only type of education that we have been introduced to and the only model we employ in our current educational activity. Hence, without going into details, we shall briefly delineate the main characteristics of this type of education.

In conventional education, the focus is exclusively on the cognitive dimension of the learning process. As a result, all learning is seen as a cognitive process involving the mind and all the mental processes such as reasoning, logical ordering of ideas, making inferences, memorizing, remembering and everything associated with mental activity. Accordingly, the academic task is considered exclusively as the development of the intellectual capabilities of students. Nothing else is given importance. The student is like a robot that must assimilate information unilaterally provided by the teacher. The unidimensional education is, thus, similar to the models represented by the first and second quadrants in the models based on the teaching and learning activity that we discussed in the beginning. It is also similar to the Factory model of education.

The cognitive vision of learning is one-dimensional and, hence, reductionist. Education is reduced to a single dimension, namely, the cognitive, and, accordingly, places emphasis on memorizing, and intellectual, rational, linguistic, linear and materialistic training. As we shall see, the unidimensional cognitive vision leaves out other important and fundamental dimensions of education that are taken seriously in the holistic approach to teaching and learning.

b. Holistic Education (Multidimensional)

Unlike the conventional model, the holistic model of education attempts to take into account the entire field of thinking, learning and expression of the whole person. This model views teaching and learning as a pluri-dimensional and multilevel task related to the total awareness, experience and expression of the student. It considers education as an integral process involving various dimensions of thinking and different spheres of awareness. In other words, the holistic vision of education focuses on the total body-person with his/her personal, intellectual, psychological, moral, aesthetic, social, ecological and transcendental dimensions and awareness.

The holistic model identifies, in particular, six dimensions of the teaching and learning process. They are: Cognitive Dimension, Social Dimension, Emotional Dimension, Corporal or Physical Dimension, Aesthetic Dimension and Spiritual Dimension.

1. The Cognitive dimension focuses on the thought process and the capacity to reason logically. This dimension takes seriously the intellectual nature of human persons. As intelligent and rational beings, human persons thirst for truth. Seeking and finding the truth about the natural world, about humans and their societies, as well as about God are integral to human existence. Every educational process, therefore, requires to give importance to the cognitive dimension of education.

2. The Social Dimension emphasizes the social nature of human existence. Human beings are social beings who can become humans only in the context of a society. Precisely because humans are social, all learning happens in a social context of shared meaning. Accordingly, social interaction and social participation, as the social orientation to

learning has pointed out, have a significant role in the learning process. The social dimension of education, thus, emphasizes the interrelated nature of human existence and its importance for the teaching and learning process.

3. The Emotional Dimension gives due importance to the fact that human persons are psychological beings. Feelings and emotions play a significant role in making us who we are. The Stoic concept of human persons as rational who would be best if untouched by emotions is seen as a distortion of what it means to be real humans. The multidimensional education understands that all learning is accompanied by an emotional state which can greatly affect the learning outcome and, hence, it recognizes the role of emotions in the educational process.

4. The Corporal or Physical Dimension is an important factor in teaching and learning that has been sidelined for too long. Human persons are essentially body persons and the embodiment is the substratum for all other dimensions of human existence including the teaching learning process. The holistic education acknowledges this truth about human persons and recognizes that all learning occurs in a physical body. Therefore, the mind-body harmony is an important element in the quality of learning. What we learn, we learn in our bodies and there can never be any learning outside the body. In a way, the physical dimension is central to the learning process.

5. The Aesthetic Dimension is another aspect of human existence that has also been ignored in the educational process. Along with truth and love, beauty is a key aspect of human existence. Holistic education realizes this truth and considers the aesthetic dimension as an important element in the educational process. By emphasizing the

dimension of beauty, it directs our attention to the interiority of the learner and underscores the need for giving expression to the interior life of a person as a significant dimension of the educational process. It sees artistic expression of inner life as a key to a happy life. This makes it mandatory that the teaching and learning process gives due importance to the aesthetic dimension in education.

6. The Spiritual Dimension is the third and crucial aspect that has also been overlooked in the teaching and learning process. The reason for ignoring the place of spirituality in education is that, first, it wrongly gets associated with sentimentalism and superstition. Then it is judged to be unscientific and unfit for consideration in the educational process. And finally it is delegated to the sphere of emotionalism emerging from a pre-scientific mindset. However, the spiritual dimension of a person is a much deeper concept that views human persons as transcendent beings who seek to go beyond the limitations imposed by embodiment as well as the space and time categories. Spirituality is, thus, seen as a person's capacity to open oneself to the totality of reality that confronts us at every moment of our existence. Holistic education considers the spiritual dimension to be the total and direct experience of universal love that establishes a sense of compassion, fraternity and peace toward all beings. The spiritual dimension of education broadens one's sphere of existence so as to include the cosmic and transcendental levels.

The emphasis given to the six dimensions of thinking and learning testifies that the holistic approach to education focuses on the total person who is, at once, embodied and sensual, intelligent and capable of emotions and feelings, aesthetic and social, moral and spiritual. The complex

nature of human persons makes the educational process itself complex. Each of the dimensions of the human person is involved in the teaching and learning process. Overlooking any of the dimensions would make education somewhat truncated. Therefore, it is essential that all genuine educational process should take the total person into account. Education becomes genuinely holistic when each of the six dimensions of thinking is given due importance.

Besides the six dimensions of thinking, the holistic model also identifies five levels of awareness and experience that are seen as integral to the teaching and learning process. They are: Personal Level, Community Level, Social Level, Planetary or Environmental Level and Kosmic¹¹ or Spiritual Level of awareness and experience. The last level should not be seen as one along with the other four levels. It must be viewed as inclusive of all the individual, community, social, and environmental levels. The holistic education visualizes the Spiritual level as a presupposition for all other levels for the reason that a deep level of awareness and experience is fundamental to all genuine education.

1. The personal or individual level of awareness and experience looks at the person as an independent unit. Here the focus is on the self-awareness of the person. One acquires the awareness of the self through personal or individual experiences. It is this awareness emerging from personal experiences that constitutes one's identity. This identity allows one to expand one's awareness and

¹¹ Ramon Gallegos Nava uses the neologisms 'Kosmos' and 'Kosmic' to differentiate it from the planetary level and to indicate the larger spiritual sense in which he is using the term.

experience to wider levels. It is important that the process of teaching and learning should shape this identity by deepening one's self-awareness through personal experience. This will facilitate the movement of a person to wider levels of awareness.

2. The community level of awareness and experience is wider than the first in the sense that here the person is concretely situated in the context of a community where face to face relationships exist. The community provides the locus for the self-awareness and experience to take place. From this perspective it can be said that learning is primarily communal and teaching and learning is basically community education. A person's relatedness to the community in terms of interactions and exchange contributes to the expansion of one's awareness as a person and as a member of a community.

3. The social level of awareness and experience, predicated upon social education, entails a much wider awareness. The person at this level becomes aware of the cultural heritage of the society of which he/she is a part. Transcending the personal and communitarian levels, the social level of awareness enables a person to critique and expose the cultural and ideological distortions operating in a society. The function of social education is to make a person responsible for the well-being of society. The holistic education focusing on the social level of awareness and experience should equip the person to become a consciously active member of a society.

4. The planetary or environmental level of awareness and experience that has been sidelined for the greater part of the history of education has received importance and relevance with the realization of the impact of ecological

degradation on the survival of humans and other life-forms. The holistic model of teaching and learning emphasizes the role of environmental education for the further expansion of one's awareness and experience to a higher level. At this level one's awareness encompasses the planet and one perceives oneself as a knot in the planetary web of relationships. The consciousness of being a part of the entire planetary life process enables a person to be a responsible and active member of the earth community.

5. The Kosmic or spiritual level of awareness and experience is seen as the heart of holistic education because it encompasses all other levels of awareness and provides an integral vision of education. Therefore, this level of awareness that has so far been excluded from education has assumed centrality in holistic education. For this level of awareness is seen as the sphere of love and wisdom that allows us to perceive ourselves as spiritual beings. The awareness of our essential nature as spiritual beings takes a person to the vantage point from where he/she could experience universal love, compassion for all living beings, solidarity, fraternity, peace and harmony. This awareness and experience is considered to be the ultimate goal of the educational process.

The five levels of awareness highlight the dynamic process involved in education. It is marked by a movement from self-awareness toward the spiritual awareness through community, social and planetary levels of awareness. This expansion of awareness is not chronological but synthetic in the sense that at every level all the other levels are present in a greater or lesser degree. At the same time, each of the higher levels encompasses the lower levels. Thus, the community level includes the

personal; the social level includes the personal and community levels; and the planetary level includes the personal, community and social levels. The spiritual level of awareness not only encompasses the personal, community, social and planetary levels of awareness, but it also facilitates the integration of the cognitive, emotional, physical, social, aesthetic and spiritual dimensions of the teaching and learning process. Therefore, the spiritual level of awareness marks the culmination of the educational process. The challenge of holistic education for philosophical and theological formation, is to approach each of the levels of awareness and each dimension of thinking, from the spiritual level of awareness that alone can give coherence to any authentic education.

Conclusion

Our discussion so far has convincingly shown that teaching-learning is a complex process that involves theories of education, pedagogy, prerequisites for learning, understanding the student profile and methods of assessment and evaluation. Added to them are other elements such as the syllabus, schedule and resources. In this paper we have focused mainly on theories or models of education. We have discussed four models of education based on the teaching and learning activity, the expected outcome, the orientations to learning and the dimensions of teaching and learning. The main purpose of the discussion was to sharpen our perception of what is entailed in genuine education and the processes involved.

We have realized that authentic learning presupposes participatory learning as exemplified in the fourth quadrant of the first model. The teacher's participation must be characterized by the quality of nurturing as shown

in the womb model of education. Moreover, the teaching and learning process needs to incorporate the various orientations to learning as discussed in the third model. And, finally, and most importantly, the educational process must take into account the various dimensions of thinking and the different levels of awareness as shown in the holistic model of education.

These insights, if incorporated into our philosophical and theological education, can enrich our teaching and learning activity in our institutions. For this, there is a need to transcend the factory model and the unidimensional model of education that have, perhaps, become the only models we employ in our teaching of philosophy and theology. Familiarity with other models and the possible contributions that they can make to education can help us go beyond the unconsciously inherited models on which depends our current practice.

It also presupposes that we redesign our syllabus and rearrange our schedule in such a way that they facilitate the introduction of new models of education into our institutions. Only with this kind of reform and renewal can we think of introducing new pedagogies. For, improvement in the teaching and learning process is predicated upon the models of education that we adopt. The attempt to introduce new pedagogies without altering the models of education would inevitably end up as an exercise in futility. Hence, the primary challenge before us is to seek appropriate models of education and suitable pedagogies will follow in its trail. At the same time, it must be clearly borne in mind that it is not possible to bring about such reforms overnight. Hence, the process should be viewed as a long term project or goal which needs to begin now.