

THE TEACHER AS AGENT OF CHANGE

Dr. Gloria C. Gatchalian

Director, Eulogio "Amang" Rodriguez Institute
of Science and Technology
The Phillipines

While analyzing the spectrum of manpower development, the teacher may be seen as the center that permeates to all sectors. The students produced depend mainly upon the teacher. The teacher's lifestyle reflects a pattern the students absorb and internalize consciously and unconsciously in their association with one another. A child in kindergarten, when instructed to do something by his or her parents which does not conform to the teacher's ways, would retort: "This is not what the teacher said."

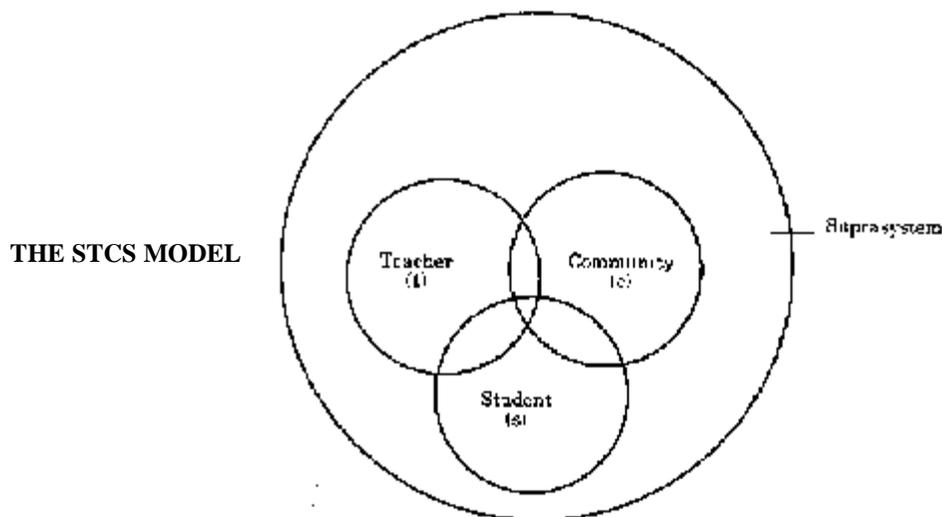
In these formative years, the teacher is an idol of the growing child. His teachings, orally spoken, his daily ways of life, behavior patterns and manners of conduct, are continuously being registered in the child's brain, nervous system and emotions, all which ultimately get into the biological system that makes up the total nature of the person, gifted with bios (life), interacting with other living forms in an environment in the fullness of life.

In an examination of the societal patterns of population, it is the teacher who produces the future professionals. It is also observed that one can trace some imprints of the teacher's behavioral patterns, training skills, concepts, beliefs and practices among the students that passed his tutorship. Thus, the kind of professionals manifest both in their private and occupational lifestyles some traits that their teachers have handed down to them. An honest and diligent teacher practicing what he preaches, both in the classroom and in the outside world, would transmit these traits in the developing child. On the other hand, a lazy teacher, a corrupt one, tampering grades, could present unrealistic facts just to consume the scheduled teaching hours and use stereotypical laboratory experiments not inciting the inquiry of the student. This teacher will also transmit to the child these practices which unconsciously and consciously become a part of the child's lifestyle. In effect, this teacher produces a student with corrupt ideas and practices to the extent of degrading and depleting environmental resources attributable to his ambition to amass wealth and to deprivation of his fellow men in the enjoyment and contentment of bios.

Considering the above scenario, the teacher can be regarded as the central factor around which the developing student revolves and looks up to, especially in his or her formative years. Thus, the preservation of bios must be emphasized at the early stage of the learning child. This is the teachable stage, when a child internalizes concepts and lifestyles he associates with.

THE STCS CONCEPT

The foregoing process is presented by a model below illustrating how the STCS concept represents the factors that play a major role in the pedagogical process of learning.



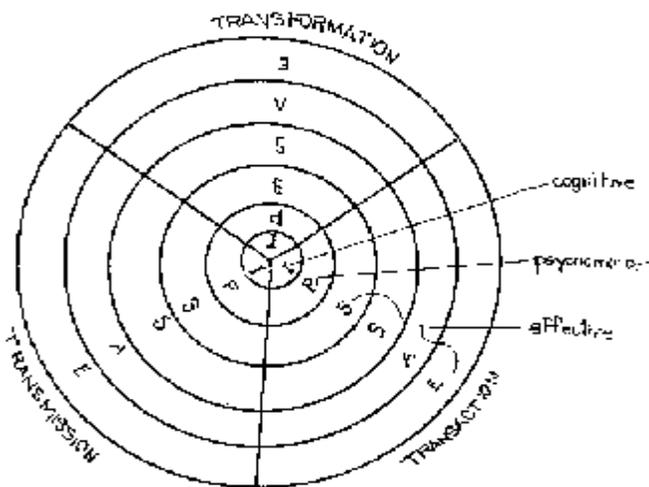
The STCS Model

There are several communities in the Suprasystem. In a Community, both the Teacher and Student are in close association, each one sharing the other's ideas, beliefs and practices, customs and traditions, knowledge and feelings. This is a process by which transmission of these elements are internalized by one another, thereby, becoming a part of one's behavioral patterns. Resources around serve as inputs to teaching. Other manpower inputs such as parents, clergymen, leaders and politicians are also sources of informative materials that enhance teaching. This provides a situation, too, for teachers to transmit concepts and impart knowledge the students acquire; and considering the other way, students also reflect some developed traits gained from other members in the community with whom she or he comes in contact. Such is a phenomenon where the teacher also learns from the student.

Conceptualizing The Teacher As Agent of Change in Bios in the Next Millennium, three processes are involved in actualizing the three (3) domains of Education (Cognitive, Psychomotor and Affective) which are 3Ts or T₃.

- a. Transmission - a process generally formal-school based where educational concepts and knowledge are imparted through a structured system. The main characteristics of this process are a highly organized, rigid syllabus and methodology, single textbook, external examinations and external discipline with little or no attention to students' emotional life. Moreover, it is heavily teacher-dominated with high expectations for the students to acquire or accumulate knowledge after thorough rote-learning techniques¹. Furthermore, on a more general level, this transmission process has its roots in the cultural transmission ideology described by Kalberglund Meyer² where the primary task of education is to transmit to the present generation, bodies of information collected in the past. Further, the transmission emphasizes the cognitive domain.
- b. Transaction - emphasizes students' interactive role in learning, SEAMECO-RESCAM.³ These studies found that whatever the teaching goal, it would seem that teachers need to encourage students to express their views during classroom discussion, in field trips or at any occasion when a situation arises. It is at this stage that the student's understandings, intuitive beliefs and alternative frameworks are strongly dependent upon the context in which they were developed. Consequently, this significantly influences the way an individual interacts with phenomena in various ways. In this situation, teachers need to build upon students' prior knowledge and conceptions. In the teaching-learning process, students interact, to a certain degree, with the teacher, which reflects the student's experiences and beliefs about his world drawn from the immediate environment. Hence the local community can impinge on the science curriculum. In this process, there is a high degree of effective teaching, in the sense that students are able to voice their opinion, ideas and concepts upon which future directions to meet their needs are conceptualized and made concrete. On the other hand, teachers are facilitated to identify resources and formulate strategies to respond to the students' needs. Eventually, rapport is established between the teacher and student, making the teaching-learning situation a satisfying one.
- c. Transformation - a process by which the effect of the accumulation of knowledge and concepts triggers the teacher and student to engage in an interaction stage, exchanging views, ideas, beliefs and practices which when deeply internalized by the student, become a part of his system resulting in a changed, transformed individual. Thus, it behoves the teacher be dedicatedly concerned with the needs and problems, strengths and weaknesses, individual differences of the learners in particular, and the community in general. At this point in time, the student, when properly taught the time values of the "love for biology and the belief that bios is a link that unites all people", Vlavianos-Arvanitis,⁴ then can we live a life of fullness putting into practice God's law - "love your fellow men." It is through our love of fellow men that we can get from our environment only what we need to maintain homeostasis equilibrium, so that others may also have bios and abundance - thus, live and let live.

THE EDUCATIVE PROCESS PIE (EPP) MODEL



The above model, the Educative Process PIE, presents three educative processes - Transmission, Transaction and Transformation - cutting across layers representing the Goals of Teaching which are the Aspects of Humaneness namely, Intellectual (I), Physical (P), Social (S), Spiritual (S), Emotional (E). These Aspects of Aesthetic (A) and Humaneness affecting mankind, are classified into the three (3) skills gained

in education which are Cognitive, involving the Intellectual (I); Psychomotor, involving Physical (P); and Affective, involving the Social (S), Spiritual (S), Aesthetic (A) and Emotional (E). Affective, as the highest level of educative development output, is product of transformation process when the student becomes a changed individual moulded by the teacher, as the human factor in development yesterday, today and tomorrow.

Realizing the Teacher As Agent Of Change in Bios in the next Millennium, it is perceived that he institutes a Teacher Decalogue where he must:

1. translate in his own personal life the values of love for the environment and other living forms, keeping in mind that his life is a mirror which reflects right conduct for replenishing our environmental resources; being a dedicated steward of God's gift, abating pollution, utilizing resources only within the limits of his daily needs, enhancing a closer relationship with his fellow men, working in harmony with one another in the preservation of bios;
2. develop understanding, interest and concern for the students' needs and problems as well as the community where he or she operates;
3. give due recognition and appreciation incentives and awards for a job well done and accomplishments worthy in maintaining, nurturing, sustaining and promoting environmental conservation and preservation of bios;
4. utilize indigenous resources, giving due account for their replenishment, propagation, and preservation;
5. motivate the students to conduct studies/investigations in constructing technologies compatible with their needs to improve quality of life;
6. develop curricula geared towards preservation of bios, within the level of understanding, appreciation and comprehension of the students, the teacher's target clientele;
7. engage in "community outreach program" where he or she gets into real-life situations, ministering to the community populace the urgent need to preserve life: spreading the news that the community's wrong-doings in polluting the environment boomerangs in the occurrences of floods and pollution that endanger their lives and livelihood;
8. tap the policy-makers and politicians in soliciting their wholehearted cooperation in instituting policies to preserve life extending rewards and punishments, worthy environmentalists and culprits of environmental pollution;
9. conduct studies, research investigations on the causes and effects of man's malpractices in the utilization of the resources that affect community-based and global environment as a whole, and;
10. promote international cooperation and harmony in the preservation of bios throughout the world and throughout life.

REFERENCES

1. Chellandurai, N., Wheeler A.E., Thinking Globally, Transforming Locally: The Case for Health Science Education in South-east Asia, 1988.
2. Kalbergland M.R., Development as the Aim of Education, Harvard Educational Review Vol. 42 No. 4, November 1972.
3. SEAMEO-RECSAM, Penang, Malaysia, Innovative Approaches to Classroom Testing and Measurement in Secondary Science and Mathematics, 1984.
4. Vlavianos-Arvanitis A., (ed.), Biopolitics - The Bio-Environment, Volume of Proceedings of the First Biopolitics International Organisation International Conference held in May 1987, 1988.

Dr. Gloria C. Gatchalian holds a Ph.D. in Education and is project director at the Eulogio Amang Rodriguez Institute of Science and Technology in the Philippines. A recipient of many scholarships and awards, she is member of various scientific organisations and has also been a UNESCO and IFS International Conference delegate in many countries.