



Global Scientific and Academic Research Journal of Economics, Business and Management

ISSN: 2583-5645 (Online)

Frequency: Monthly

Published By GSAR Publishers

Journal Homepage Link- <https://gsarpublishers.com/journals-gsarjebm-home/>



Need for a Paradigm Shift From Teaching to Learning

By

George Kallungal, Ph.D., ABPS

Professor Emeritus, University of Guam Clinical Psychologist, Kallungal's Medical Clinic, Guam



Article History

Received: 2507/2026

Accepted: 06/08/2026

Published: 08/08/2026

Vol –5 Issue – 8

PP: -13-20

Abstract

What is learning? This question has aroused the interest of parents, teachers, educators, psychologists, sociologists, anthropologists and other social scientists interested in answering this question. Although the question is still not yet fully answered and understood, their contribution has made it possible to gain a better understanding of the processes involved in learning. Learning is a very complex process, in which the learner plays the primary role and the rest, including teachers, play a secondary role. In the past, it was thought that the teacher played the only and the most important role. Learning involves utilization of many internal and external processes; these internal processes are thought to be more within the control of the learner, especially when the learner achieves reasonable levels of maturity in the different functioning systems. External sources can also arouse interest and motivation in the learner, but they alone cannot make the learner learn. This is a major shift from the traditional definition of learning. This shift demands that all parties interested in enhancing learning, especially school learning, critically examine what they need to do to promote learning in children.

Introduction

Preface

This paper is written as a personal essay, based on the experiences of the author gathered during a decade of high school teaching and more than four decades of university teaching. This is the product of much meta-analytical work and critical examination of what has been done in education to help children learn and subsequently become functioning members of their communities. Learning requires investment of efforts and energy by the learner but if the learner does not reap any benefits of such efforts, the learner is likely to stop the efforts at some point in time. Rewards and punishments may help to maintain these efforts for some time, but their long-term maintenance is likely to depend on the learner's realization that continued investment of energy will bring about desired outcomes. This chapter is written to facilitate better understanding of what learning is and what learners, teachers and educators need to do to promote learning; learning must produce expected results and it must enhance the functioning of the learner and that of the whole community in which the learner lives. Human beings are born as finite beings and as finite beings they will always have difficulty in functioning but effective learning can reduce the fallibility of human beings and increase their functional capability. With the proposed shift in paradigm, learners are likely to enhance their learning and improve their life adaptation.

Traditional definition of learning and its weakness

Traditionally, learning was defined as a simple S (stimulus)-R (response) reaction. The teacher gave information from a prescribed text book, provided explanation on the information given and the student took in the information as given and the learner gave a response, as asked. The teacher and the text book were the main sources of information for the learner and the learner was thought to be a mere passive recipient of the information given by the teacher. The teacher decided what the given stimulus would be and the teacher also defined the expected response from the learner. Assessment of learning focused on the reception of the stimulus given by the teacher and exhibition of the expected response as defined by the teacher. If the learner accepted the stimulus, as given, and responded to it, as prescribed by the teacher, the learner was assessed to have achieved learning. This is called garbage in, garbage out. This instructional method has made the learner very passive in the learning process. Reception, memorization and retrieval were thought to be the most essential processes in learning. This type of teaching and learning made the learner engage in rote memorization of the information given and regurgitate it at the time of the assessment. This method has not had much success in preparing the learner to face the challenges of living. It is also clear that this definition of learning has not had much success in achieving learning.



The learner is not a robot but a person who needs to play an active role in the learning process. The learner has many learning processes and they need to be utilized if learning is to have long-term beneficial effects. As will be explained in this paper, learning is a very active and interactive process. The learner has many internal systems that need to be activated and utilized if learning is to produce beneficial effects. The response given by the learner needs to be the product of the learner's internal and external processes. The learner is expected to learn better if these internal processes are activated and learning helps the learner to face the challenges of living a better life. A paradigm shift from teaching to learning is likely to produce these beneficial effects.

Learner as the key player in the learning process

Today, learning is seen as a very complex process in which the learner plays the key role; the learner's context is also thought to play a major role in learning. Learning does indeed begin with an incoming stimulus, but the stimulus can come not only from the text book but also from many other sources. Technology has made it possible for the learner to get access to information from other sources. In many ways, this is a blessing in disguise for teachers because this has made it possible for teachers to devote more time to helping the learner to process information. The learner recognizes that the explanation given by the teacher can have other varied interpretations. The learner also recognizes that the response given to the stimulus can be many and varied. Learners need to have a better understanding of the internal processes involved in learning. Learners need to realize that the processes involved in learning are within their control rather than within the control of the teacher.

Acquiring information from the text book and accepting explanations given by the teacher are not the main goals of teaching; they are simply the means to reach certain ends. The ends are more important than the means. Teaching has given greater importance to the means rather than to the ends. The long-term purpose of education is to prepare the learner to face the challenges of living. Children will be better prepared to face the challenges of life if their functional systems are developed during their formative years. The learner needs to focus on the common core processes employed by the learner and on the common core development of the learner rather than on common core curriculum. Curriculum is simply a conduit to help the learner achieve long-term goals. An incoming stimulus is likely to be better processed if the processing systems are adequately developed. The response given by the learner cannot be entirely dictated by the teacher; it should rather be the product of an intense intra-personal and inter-personal interaction between the stimulus and the response given; fellow learners, teachers and the context in which learning takes place also play a role in learning. This requires active involvement of the learner in the learning process.

Why is this shift in paradigm needed?

Learning is primarily the responsibility of the learner, especially when the learner is capable of managing learning independently. Parents and teachers need to guide children in their learning process but when they are able to learn by themselves, parents and teachers need to pull back on the external cues given and allow the learner to rely on their internal cues. The learner learns best when learning is carried out in one's own preferred and unique ways. This proposed shift is expected to help the learner become more autonomous, independent and responsible individuals. Schooling is supposed to be an apprenticeship for future living.

After birth, children, in most countries, spend about 3 to 5 years at home and about 13 years in school. These are called the formative years. Do children need these many years of learning and apprenticeship to become responsible adults and to face the challenges of living? It all depends on the beliefs people have about the nature of human beings. In some countries, children get less than 18 years to be recognized as adults, while in other countries, they get even more time. Children do not need much time to prepare for adulthood if they live in an externally controlled environment; they only do what they are told to do. Democratic societies believe that human beings can live a free and autonomous life if their natural systems are adequately developed and they are able to live their life based on the prompts given by these systems. These societies may need more time in apprenticeship as children prepare to live a free and autonomous life when they become adults.

America is a free and democratic society. Americans believe that children can grow up and function independently if they are given adequate help and guidance during the years of their formation. Children in America are given about 18 years of formation and at age 18 they are accepted into the ranks of adulthood. But children can function as adults when they reach the age of 18 only if they are helped to become responsible adults. If they are treated as children for all the 18 years of formation, at age 18, they are not likely to behave as responsible adults. The home and the school need to prepare children to become adults and this goal can be achieved only if their functioning systems are adequately developed and they are given more opportunities to function as adults as they become older. Schooling plays a significant role in preparing children to become responsible adults. As children progress from grade to grade, they should be expected to function more and more independently. They must learn to take responsibility not only in what they do and but also how they carry out given tasks. They should not be treated as robots during their developmental years; they need to be treated as individuals who can function as free and autonomous beings, as they become more and more mature.

Education should help children to take an active role in their learning. Unfortunately, education in America has not helped children to become active participants in their learning process. They are often told to comply with what they are asked to do in a passive manner. Parents and teachers often tell children what to do and they only do what they are told to do; they do not always explain why they are asked to do

certain things, in certain prescribed ways. This type of training will make children passive and after 18 years of such training, they are not likely to become autonomously functioning human beings. This shift is needed to prepare children to become responsible and autonomous adults. This shift should make the learners more active in their own learning; they need to function as key players in their learning. If they are given opportunities to become active learners during their formative years, they are likely to become more responsible, active and independent learners when they become adults. This is exactly what democratic societies need to do. When all children perform as expected, they become more responsible learners and that helps communities to thrive. Democracies can function only if each and every member of a democratic society is able to function autonomously and independently.

At the time of conception, children come to life with many gifts; these gifts need growth and maturation. In the first 3 to 5 years, parents play an important role in developing the mind, the heart, the spirit and the body of the child. During these early years, parents need to provide needed nurturing and guiding in order for children to achieve growth in their internal functioning systems. At about age 5, they start schooling. Schools need to further develop these gifts; they also need to teach academic and psychological and socio-cultural skills. Teachers can play a very important role in helping children develop their internal functioning systems. Teachers need to keep in mind that they do not really teach subjects; they rather educate children. They use their subject as a conduit to bring about desired outcomes in the functioning systems of the students. Teachers are likely to have greater success in instruction if they educate children first and then teach them. Teachers educate children by forming and molding them, giving more attention to building up their existing natural strengths and modifying their existing weaknesses. Teaching subject matter is likely to be more beneficial if children are better prepared for receiving the information given and they are encouraged to process information in their own unique ways.

This paper is written to help the reader understand that learning is a very complex process in which the learner plays a very important role. This paper will bring out the processes involved in learning. The learner has to play an active role in learning. It is important for the learner to understand these processes; parents, teachers and other significant others also need to understand these processes and they need to enlighten, inspire, energize and empower the learner to do what is needed to enhance learning

What is learning?

Learning was thought to be the product of a simple stimulus-response reaction. Today, learning is seen as a product of many intra-personal, inter-personal and contextual interactions. Learning is a very complex process and it cannot be explained as a simple stimulus-response reaction. Learning has many steps. Learning is like a climbing a ladder. Every step on the ladder is important and there is danger in by-

passing any step. To reach the top of the ladder, the learner has to take a step-by-step climb and take every step on the ladder.

The learner is a person, not a robot. The learner is equipped with many internal functional systems and they do play a role in learning. There is evidence to indicate that learning tends to be better when the learner utilizes as many internal and external functioning systems. In the early stages of human growth and development, these systems are not in fully functioning shape and as such they cannot be used autonomously by the learner. Parents and teachers do play an important role in helping the learner in developing and utilizing these systems. In fact, as children grow up and mature, they need to be encouraged to rely more on their internal cues and reduce their reliance on external cues. Internal cues should take on a crescendo sequence while external cues take on a decrescendo sequence as children move from grade to grade. By the time, students graduate from high school, they should be able to stand on their own feet and function independently.

Need for process-learning and product learning

Learning is the product of many learning processes. Learners need to convert information into knowledge. Knowledge is the product of information processed through the internal systems. During the years of development, children are given information and they are helped to process the given information and convert it into knowledge. Knowledge acquired helps the learner to adjust and adapt to life situations. Without adequate knowledge, human beings will not be able to live efficaciously. Information can and will become obsolete over time. Then, the learner needs to have the capacity to access more information and get relevant knowledge from it.

Human beings are born with many systems to acquire knowledge and these systems need to be utilized in order for learning to take place. Utilization of these systems makes the systems function better. Exercise makes it possible for these systems to grow and develop. During the formative years, children need to be given exercise to make these systems more functional. The more these systems are exercised, the better the capacity of these systems. During the early years at home and in school, parents and teachers need to give them exercise to enhance the capacity of these systems. This is called process learning.

Products are the outcomes of learning; these products can become obsolete over time, but the processes of learning will never become obsolete. This is why it is important for parents and teachers to give more importance to process learning rather than to product learning, although product learning is also very important. Process learning helps to enhance the capacities of the learner. A hungry person given a fish can satisfy hunger for one day, but if the person learns to fish, hunger can be satisfied every day. Product learning helps the learner to get a fish but process learning helps the learner to catch a fish every day.

Learning does indeed begin with a given stimulus

The learner receives an external stimulus through one or more of the learner's five sense modalities. Some learners use one sense modality for reception of the stimulus while others may use more than one sense. Research indicates that reception of the stimulus tends to be better when the stimulus is received through more than one sense modality. Research also indicates that all sense modalities are not of equal dominance; some are more dominant than others. Reception tends to be better when the learner receives the stimulus through one's dominant sense modality. It is through practice that the learner develops an understanding of one's dominant sense modality and of the reception process. The teacher may have an understanding of the teacher's own reception methods, but not the learner's methods. The teacher should not assume that the learner receives information in the same way as the teacher did. Learning is unique to each and every learner. The traditional approach to teaching and learning assumed that all learners received information in the same way. This is not true. This is why a paradigm shift is needed.

The learner may have information in the long-term memory related to the stimulus received. This information needs to be retrieved and processed but such accessing and processing can be carried out effectively only if the learner is actively engaged in this process. This requires personal efforts and motivation. The teacher may play an encouraging role in this process but this is primarily the work of the learner. The proposed paradigm shift has a higher probability of achieving this goal.

Learning is paying attention to the given stimulus

In order for the learner to receive a stimulus from the world outside and connect it to existing information stored in memory, a high level of attention is needed. Attention makes it possible for the learner to focus on the given stimulus. People pay attention in many different and varied ways; they need to have an understanding of their own meta-attention strategies, that is, an understanding of their own unique ways of paying attention. The sense modalities can hold information only for a few seconds. Distraction, external or internal, removes the stimulus from awareness and that makes it impossible for the learner to hold and process the stimulus. Research indicates that students, today, have much external and internal distraction and therefore they are not able to receive and hold the stimulus given or raise their awareness level of the existing stimulus. Attention makes it possible for the learner to hold the stimulus for a desired period of time and process it. Distraction interferes with attention. Learner needs to acquire attention strategies to hold the information received by the senses. Each learner relies on preferred strategies to improve attention. This proposed paradigm shift makes this possible.

Learning is possible only if the learner uses rehearsal strategies to hold the stimulus for a desirable period of time.

The learner uses many different and unique rehearsal strategies to hold the stimulus. The best rehearsal strategy for a given learner is the one that works best for the learner and only the learner knows it. Externally suggested strategies may work if the learner is used to them and they are consistent with what the learner has used before or else they may not work and they may actually interfere with attention or they may negatively affect the existing methods. Teachers may wish to encourage students to rely on their existing rehearsal methods rather than suggesting new methods. This paradigm shift makes it possible for the learners to rely on their own existing methods of rehearsal.

Learning is perceiving

Once a stimulus is received, the learner attempts to make sense out of it; this is called perception. Perception is the product of making initial sense out of the incoming stimulus. This is a very subjective process. This process is a pre-cursor to acquiring an objective understanding of the stimulus. In fact, an objective understanding of the stimulus can be acquired only by going through one's perception. Teachers attempt to provide instructional assistance to provide objective understanding of the stimulus but they often ignore the learner's existing perception or the learner's subjective understanding of the stimulus and that may actually block the objective understanding of the stimulus. Learner's existing perception is an antecedent to acquiring an objective understanding of the stimulus.

Learning is processing

Perception leads to conceptualization. Conceptualization is the product of internal processing by the different processing systems. Information becomes knowledge as a result of internal processing. Human beings have many processing components, some of them more dominant and others less dominant. Some learners process information through the mind, others through the heart or through the spirit or through the body, or through their gender or through their culture. The best processing is what works best for the individual. Multiple processing tends to make conceptualization better as compared to processing only through one system. When the learner is encouraged to process a given stimulus through one's dominant processing systems, conceptualization is likely to be even better. The learner generally has a better understanding of the type of processing needed to achieve the best outcomes. Teachers tend to suggest the processing they carried out and that may inhibit or interfere with processing carried out by the students. The learner needs to rely on one's preferred processing methods and styles.

Human beings have many processing systems and it is important for parents, teachers and students to understand these systems and especially the systems that are dominant. The following is a list of the different processing systems:

Cognitive processing

The mind is a processing component. Some learners process information through the mind. They learn by utilizing their mental capabilities. They tend to have high IQs. The mind

engages in many sub-functions to make sense out of the given stimulus, such as analysis, synthesis, comprehension, evaluation, application, etc. The mind also engages in hypothesis formulation and in deductive and inductive reasoning to test the hypothesis. Learners who have a critical mind rely on their mental capabilities to make sense out of the stimulus given. Their conceptualization is the product of their mental processing.

The mind does indeed play a major role in processing. At the time of birth, the mind is not in fully functioning shape but throughout the course of life, the mind acquires greater and greater capability if the mind is given healthy inputs to achieve growth. Early experiences do play an important role in the development of the mind. School learning also plays a very important role in cognitive development. During the schooling years, students need to engage in intellectually stimulating activities to promote intellectual growth. There is some indication that students, today, are not getting adequately stimulating intellectual activities in the classroom and as such many children's mental aging is not keeping pace with their chronological aging. This is not desirable. Hopefully this suggested paradigm shift will make it possible for the learner to achieve a higher level of intellectual growth and development.

Affective processing

The heart is also a processing component. The heart represents human emotions. Actually, it is the limbic system of the brain that engages in affective processing. Learners who have high EQs tend to process information through their heart. Affective processing can also provide adequate understanding of the information given, although this processing is different from cognitive processing. Affective processing looks at reality from an emotional point of view. Teachers generally tend to encourage mind-over-heart processing and such a practice may not always be desirable, especially for the affective learners. Learners need to rely on their dominant processing systems. Learners with dominant affective processing systems, tend to process information from an affective perspective. The best processing system is the one that gives the best understanding of the information given and that depends on what is dominant in the learner. Learners who are dominant in affective processing tend to be more compassionate, loving, caring, sensitive and tender. Such processing leads to more harmonious inter-personal relationships.

The heart, like the mind, is a functioning system and it is capable of achieving higher levels of growth and development. Parents and teachers play an important role in the development of the heart. Attachment between the mother and child in the early years of development plays an important role in affective learning. It is the product of strong bonds established between mother and child. Sibling relationship and the relationship with the father also play a role in this development. Teachers who play an authoritative leadership style appear to have a strong impact on the affective functioning of the learner. In school, healthy peer interaction

also plays a role in this. Teachers who encourage students to engage in group learning processes can facilitate not only social processing but also affective processing. Affective processing can be enhanced through pleasant group work and harmonious social interactions in the classroom. Children should also be encouraged to get involved in other extra-curricular activities in school. That also helps to promote affective and social learning.

Spiritual processing

The spirit is also a processing component. Many people believe that human beings are spiritual beings, although there is no consensus on what constitutes the spirit. Some learners do process information through the spirit. If such processing helps them to get a better understanding of the information given, it should be encouraged rather than discouraged. Spiritual processing is carried out under the guidance of existing personal, religious, social and cultural values. These values are learned when children have positive relationships with their parents, teachers, siblings, peers, their culture and their society. If these values help the learner to achieve a better understanding of the information given, they need to be encouraged.

The spirit, at the time of birth, is not in fully functioning shape. As children grow up, they identify with their parents and learn their values. Children's attachment to the parents does play a role in assimilating their values. Healthy and satisfying sibling relationship also plays a role in values acquisition. School learning also plays an important role in values acquisition if teachers reinforce these values and they serve as role models for children. Healthy peer interaction is also desirable for this.

Spiritual processing is different from religious processing. Spirituality springs from humanity, while religiosity springs from religion. They can and do complement each other if they play a complementary role. Spirituality is simply the recognition and acceptance of the humanity of human beings. Human beings are finite beings, who are not perfect and therefore they are likely to make mistakes; they need to recognize this and learn to be little humble. Spiritual values should help people understand the need to search for truth and honesty. Spiritual values focus on the need to empathize with others, treat other people with love, care and sensitivity. These virtues of life are learned; children learn these virtues if parents, teachers and other significant others teach these values and they serve as role models.

Physical processing

The body is a processing component. Some learners process information through their body. Body-kinesthetic learners use their body and its movements to process information. They process information through movements and other physical activities. They learn in their own unique ways and if they are able to learn better, they should be given support for learning what they need to learn in their own unique ways. Teachers may not know how students learn and therefore they should not control their learning processes. Learning is learner's

responsibility; let the learner decide how learning should take place.

These learners often experience difficulty in learning in group situations. Most learners use their own processing systems to learn. Only a small percentage of learners learn through physical processing. When these learners are mixed with students who learn differently, they experience difficulty in complying with established rules. These rules are established based on what is beneficial to the majority of the learners. Only a small percentage of learners learn through physical processing. Learners who learn through movement or other physical activities often get blamed for not following the rules; they are sometimes labeled as having ADHD. In extreme cases, they may have difficulty in learning in the regular classroom but if they are able to learn in their preferred ways, their learning style should not be characterized as a disability; they need as much support and as many opportunities as possible to learn in their own preferred, unique ways.

Gender processing

Boys and girls do not process information in the same way. Neurology and biochemistry play a role in learning. Boys and girls have different neurological systems and different biochemistry. When boys and girls process information based on their sex and gender, they not only get a better understanding of their sex and gender but they also understand information from their own point of view. This gives them a double advantage; they learn the learning material better and they get a better understanding of their sex and gender and they also learn to engage in healthy gender roles. Gender identity is becoming more and more a problem for boys and girls. Sex is given by nature; chromosomes determine the sex of a child but gender identity is taught and learned. If it is not properly taught, it is not likely to be properly learned and that can lead to many adjustment problems in life. The home and the school play a very important role in gender identity development.

Socio-cultural processing

Information processing is also guided by socio-cultural factors. These factors guide the learner's search for meaning. When learners are placed in a learning environment where they have to process information in ways that are different or contrary to their existing socio-cultural norms and methods, they are likely to experience conflicts and that will only inhibit learning. Encouraging learners to rely on their socially and culturally preferred methods of processing will help to enhance their learning. They are then likely to experience less conflicts.

Learning is storing information in the long-term memory

Processed information gets transferred to long-term memory. Learners store up information in their long-term memory in many different ways. There is no one right way of storing information. The best method is the one that facilitates meaningful storage and retrieval. Teachers tend to tell learners

to store information in long-term memory based on how they stored information. This does not enhance storing; it may actually inhibit storing. Teachers should rather encourage learners to examine their own meta-memory functions, that is, help them understand how their memory operates. Learners should store information based on their unique method of storing.

Learning is retrieving information from the long-term memory

Information stored in the long-term memory is useful only if it can be retrieved when needed. Retrieval depends on the quality of storage. If information is stored in the learner's preferred ways, retrieval becomes relatively easy. Tracing stored information is facilitated when storing is carried out based on the learner's existing criteria. Memory functions differently in the different learners. There is no one correct method. Learners need to be encouraged to rely on their unique methods based on their previous experiences.

Long-term memory has a huge capacity to store up information, images and experiences. When the learner receives a new stimulus, that stimulus gets processed and it needs to be transferred to the related files in the long-term memory. Such linking makes the incoming stimulus more meaningful. Parents and teachers should encourage learners to engage in this linking process.

Learning is reprocessing

This linked information is transferred back to the processing components and a reprocessing is carried out. When information is reprocessed through many processing components, learning becomes even more meaningful. This reprocessing makes the learner establish connections between the subjective world and the objective world. Such linking makes the incoming stimulus more connected and more meaningful. Learning is likely to produce beneficial effects with such linking and re-processing.

Learning is responding to stimulus received

The learner is the author of the response given. The response given must be based on the processing carried out by the learner and the linking of the given stimulus to related information stored in the long-term memory. External guidelines can be given for communicating the message, but the message must be crafted by the learner. The medium employed for communicating the message can be guided externally but the message must be based on the processing carried out by the learner. The message must be the product of the processing and linking carried out by the learner. Some teachers tend to control not only medium but also the message. This does not enhance learning; it rather inhibits learning. Learning includes both assimilation and accommodation. Reception, perception, conceptualization, memory storage and retrieval are parts of this assimilation process. The message crafted and the ways in which the message is communicated are parts of the accommodation process. Incoming inputs should lead to outputs, but they should not be totally externally controlled. Human beings are

capable of re-activity and pro-activity. Re-activity is simply a stimulus-response reaction; this does not involve any internal processing. This is simply a mechanical process. Human beings are not machines; they are persons. They are capable of receiving inputs from the world outside and processing them in their unique ways. Pro-activity is responding to inputs after receiving the inputs, processing them, linking them to previously received related inputs, reprocessing them and responding based on the processing carried out.

Learning is responding in compliance with the given guidelines

In any society, external behavior is guided by external guidelines. Normality and appropriateness in responding are dependent on the norms and standards established by a society. Normality is a range, not a point. There are many and varied ways of responding within this normal range. Learners craft their own messages but they need to make sure that the medium employed for transmitting their messages meet the external standards established. These standards are established to facilitate better reception of the message by the receiver. Communication is a two-way street between the sender and the receiver. Norms and standards are established to facilitate both the sending and the receiving of the messages.

Assessment of learning

In the past, assessment of learning focused on the information given to the learner. If the learner took in the information given and held it in memory for a desired period of time and was able to give it back as given, the learner is thought to have achieved learning. Learning was thought to be simply a recoding system. This was called rote learning. This process does indeed play a role in learning, but this is not learning. Teachers and educators may want to examine how other professionals assess the product of what they do. Nutritionists and dieticians give information about what people need to eat to maintain their growth. Physicians give medication to treat patients' illness. How do they assess the effectiveness of the information they give to their clients and patients? They do not ask questions on the information they gave to them; they are more interested in asking questions about the outcomes of what the given information did for them. Educational assessments need to focus not on the information given to students but on what they did with what was given to them. This will promote original, creative and critical examination of the information given to students. Information is simply the raw material to construct knowledge, skills and dispositions in the learner. Educational assessments should focus on the knowledge, skills and dispositions developed by the learner.

The psychology and the sociology of the learner

The learner is not a robot but a person. Each person is unique and learns in very unique ways and the learner lives in unique contexts. There are commonalities among all learners, but there are also individualities. Teaching and learning have given much more importance to the commonalities of the learners rather than to their individualities. All learners live in

given contexts and contextual demands have to be met when the learner responds to incoming information. In learning, there are many components: reception, rehearsal, processing, linking with existing information in the long-term memory, re-processing and responding. The first five components of learning are affected by individuality considerations; commonality seems to play a role in how the learner expresses the response. The expression of the message needs to be guided by existing contextual norms and standards.

Parents and teachers need to play an authoritative role to help learners craft their message and respond. But parents and teachers can play this role only if they understand and accept the individuality of the learner and the norms and standards of the context in which the learner lives. Parents and teachers need to understand the psychology and sociology of the learner. Psychology focuses on the individual while sociology looks at the context in which the individual lives. Social norms and standards are passed on to children by the home, cultural practices and traditions, the laws of a community and other social practices. Parents, teachers and learners need to have a clear understanding of what is considered appropriate and inappropriate in a given context. Learners get enculturated and socialized first at home and then in school. This transition from the home to school often tends to be difficult for children if there are major differences between the home culture and the school culture. Parents need to prepare their children for the school culture and teachers also need to prepare children for the school culture and for this, they need to have an understanding of their home culture. Often parents and teachers find themselves lodged in conflicts because of differences between the home and the school cultures. Parents tend to focus more on the individuality of the learner while teachers tend to focus more on the commonality of the learners. They are both very important focus points and learning is likely to be facilitated when both points of view are given due importance. Parents and teachers need orientation programs to better understand these varied perspectives. A tug-of-war between parents and teachers will affect learning negatively.

All parents want their children to do well in school and all teachers also want their students to do well in their classes. This goal can only be achieved when parents and teachers interact with each other and communicate their mutual expectations clearly. When parents and teachers have common understanding and they play a complementary role, children tend to do well in school. Parents need to make it clear to their children what they need to do to perform well in school. Teachers need to explain to the parents what their children need to do in the classroom and at home in order for them to perform at peak levels. Conflicts between parents and teachers will negatively affect the children's learning.

Parents and teachers also need to understand the psychology of the learner. As pointed out earlier, most of the major learning components function in unique ways. Parents seem to understand this reality a little better than teachers because they are with their children for many years before they start school. They understand how their children learn. It is

relatively easy for parents to understand this reality because they deal with their children on one-to-one basis daily. Teachers are likely to have more difficulty in understanding the individuality of the learner because they deal with groups of learners. The needs of group management often become primary considerations for teachers. This is why it is important for all teachers to get needed training and education in the psychology of the learner. Teachers need to understand that learners have dominant and non-dominant systems as well as preferred systems for learning. Reception is carried by the sense modalities and each learner has dominant and preferred sense modalities for receiving information. Some learners use multiple sense modalities to receive information and there is evidence to suggest that it does indeed improve reception. Learners have many varied rehearsal strategies and processing methods, some of them dominant and others non-dominant. They have also their own preferences for their own unique ways of processing information. Some learners rely on multiple processing methods. The same is true of memory strategies. Teachers who understand how these systems function are able to guide the learner toward peak learning performance. This is why it is very important for teachers to understand the psychology and the sociology of each and every learner. Teachers need to play a mentoring role at each of these stages. Learning has many milestones; at each milestone, teachers need to provide feedback and reinforcement or other interventions. Understanding the psychology and the sociology of learning makes it possible for teachers to understand these processes.

Conclusion

What will this proposed paradigm shift achieve? This shift will give more importance to the learner; the learner is actually the key player in learning. Many terms have been used to explain this focus such as child-centered learning, student-centered learning, self-directed learning, paidocentrism, etc.

This is a significant shift from subject-centered teaching and learning or from teacher-centered teaching and learning. This approach is also different from society-centered or culture-dominated teaching and learning. This shift makes the learner the center of the learning process. In this shift, parents do the job of parenting and teachers do the job of teaching but learners take responsibility for learning. Learning is a very active process and when the learner takes responsibility for learning, learning is likely to be better. Learning is the product of what each learner does in the learning process.

Education is a preparation for living. In democratic societies, people live their life in their own unique ways. Democracy is a political-economic system where every one lives their life, based on what they believe is the best for them. Children are given 18 years of apprenticeship in democratic societies to plan and prepare for their life. If these 18 years are used to develop their functional systems, they should have no difficulty in living a productive and responsible life when they reach the age of 18. If, on the other hand, they are treated as robots during the years of their apprenticeship, they will not be prepared to live an autonomous life. It is clear that many young adults today face serious difficulty as they start living a life of their own. Retrospective studies indicate that they do not acquire the needed knowledge, skills and dispositions during their formative years and therefore, when they reach age 18, they find themselves not ready to fit into a world of independent and autonomous living. Then, they may engage in self-destructive activities, rather than planning for their future and start living a life of their own. They cannot be entirely blamed for their difficulties; society must take part of the blame. As children grow up, they need to learn and take more responsibility for their learning and for their living. The proposed paradigm shift is likely to produce these results.