What Good Teachers Do

Michael Kallon

Efforts by successive governments of Trinidad and Tobago to reform the education system to meet the challenges of contemporary society have resulted in the implementation of several educational innovations. These include the Continuous Assessment Programme (CAP), the Secondary Entrance Assessment (SEA) examination, and the Secondary Education Modernisation Programme (SEMP). However, these educational innovations require teachers to engage in a paradigm shift from traditional methods to "new" approaches to curriculum delivery.

This shift requires teachers to engage in what has been described in educational circles as "constructivist teaching." Constructivist teaching encompasses what good teachers have always done in their classrooms: reaching beyond the text and the blackboard to awaken, stimulate, and broaden students' minds. It is therefore a misnomer to label this philosophy as new. Interestingly, even Plato seemed to have been aware of multi-modal teaching when he wrote: "Do not use compulsion, but let early education be a sort of amusement: you will then be better able to find out the natural bent." More recently, virtually all pioneers of modern education have developed systems of teaching based upon more than verbal pedagogy. The 18th century philosopher Jean-Jacques Rousseau declared in his treatise on education, *Emile*, that the child must learn not through words but through experience; not through books but through the book of life.

Others have emphasised an "integrated curriculum" that provides physical, moral, and intellectual training firmly based on concrete experiences. The curriculum of the modern-day kindergarten includes hands-on experiences with manipulatives, games, songs, gardening, and caring for animals. Innovators like Marie Montessori, John Dewey, Lev Vygotsky, and Jean Piaget evolved systems of instruction based on constructivist approaches.

The influence of constructivism in teaching and learning is increasing. In the US, for example, the shift toward literature-based approaches to reading and the process approach to writing is founded on constructivism. In addition, the Curriculum and Evaluation Standards for School Mathematics, developed by the National Council of Teachers of Mathematics, and the benchmarks for science literacy both have a constructivist foundation. In a sense, the increasing influence of constructivism can be seen across the school curriculum. The term "constructivism" means different things to different people, and advocates of this concept disagree on the nature of knowledge and the importance of different elements of the process. Over the years, two mutually exclusive positions have emerged.

The first position, based largely on Piaget's work, is called cognitive constructivism. It focuses on internal, individual constructions of knowledge. Within this framework, knowledge does not exist in the social environment as such, rather, social interaction is important primarily as a stimulus or catalyst for individual, internal cognitive conflict. Cognitive constructivists emphasise learning activities that are child determined and discovery oriented. For instance, mathematics educators taking this position would argue that children would learn maths more efficiently if mathematical knowledge was provided to them on the basis of what they already know, rather than have it presented by the teacher or other expert.

The second position, which is strongly influenced by Vygotsky, a Russian educator, is called social constructivism. Social constructivists agree that knowledge exists in a social context and is, at least initially, shared with others rather than represented solely in the mind of an individual. As people interact, the process of sharing results in learning. Learners redefine their own ideas while, at the same time, helping to shape the ideas of others. Social constructivism acknowledges the contribution of others in the learning process. Unlike cognitive constructivism, which downplays the role of the social environment, social constucutivism highlights that role and suggests that teachers consider all traditional questions of teaching: how to organize and implement learning activities, how to motivate students, and how to assess learning.

Despite their differing positions, most constructivists agree on four characteristics that permeate all learning. First, they agree that students develop knowledge through the process of active construction. Knowledge construction emphasises that learners develop their own understanding, which makes sense to them; they don't receive understanding from an outside source. Students should not passively receive or copy input from teachers, but instead actively mediate it by trying to make sense of it and relate it to what they already know.

Second, they hold the view that new learning depends on current understanding. This view emphasises the role of background knowledge and current understanding in information processing. Constructivists emphasise the importance of students' current understanding, that is, seeing new learning interpreted in the immediate context of current understanding.

Third, constructivists agree that learning is facilitated by social interaction. This view underscores the importance of social interaction in learning. Student interaction results in sharing, thinking, and decision making. Teachers play a critical role in this process. The creation of communities of learning in the classroom, in the school, and involving the larger community, is critical to learning.

Finally, constructivists agree on the importance of dialogue in learning. The more knowledgeable makers of the culture—the teachers—should assist learning by encouraging dialogue: teacher–teacher and student–teacher.

A constructivist teacher can therefore be described as one who encourages and accepts students' autonomy and initiative. Constructivist teachers (1) frame questions using cognitive terminologies—clarify, analyse, predict, and create; (2) allow student responses to drive lessons, shift instructional strategies, and alter content; (3) enquire about students' understanding; (4) encourage students to engage in dialogue; (5) encourage student enquiry by asking thoughtful, open-ended questions and encourage students to ask questions of each other; and (6) engage students in experiments and nurture students' natural curiosity. These characteristics are certainly the hallmarks of a good teacher.

School of Education, UWI, St. Augustine