Student-Centered Learning: Demystifying the Myth

C. Thamraksa

ABSTRACT
Teacher-centered or teacher-direct orientation has long been the focus of education in Thailand. This approach has placed an emphasis on rote learning or memorization rather than developing the thinking skills of learners. The drawback of the system is seen through the passive and dependent learners, who lack the skills to think critically and creatively. Recognizing this major drawback, the Ministry of Education has initiated a major reform of the system—from the traditional teacher-centered to a student-centered approach—with the intention of producing competent, independent and life-long learners who can keep pace with global competition. However, due to the several changes that have occurred as a result of the implementation of this student-centered approach, it leaves a number of teachers perplexed about their roles and the teaching pedagogy.

The issue of student- or child-centered learning has seen an explosion of interest among educators and school/college teachers in recent years. In fact, the term was not much recognized until the Thai National Education Act 1999 made it the key concept in the reform of education. This new approach, it is hoped, will maximize the potential of Thai people to cope with the increasing demands of the knowledge-based economy and the world of information and communication technology.

Even with this interest, however, there arises much confusion and mistrust of the pedagogical movement behind the new model. Some teachers view it as a threat to their long-time teacher-centered or teacher-front orientation, while others fear that the approach will lessen the significant role they play in class, i.e., the imparter of knowledge. Likewise, some students become sullen and hostile to this approach as can be seen from the buzz remarks that were recently reported in the newspapers that “the child-centered approach is like ‘khwai’-centered approach.” Such criticism clearly results from the failure, not of the approach per se, but of the teachers’ misinterpretation and abuse of the concept.

Despite a substantial body of literature on student-centered learning, the majority of teachers, it can be said, are still skeptical of whether the approach can really enhance student quality. Much worse, teachers are uncertain of how and what they should do to implement the approach. A number of questions regarding the feasibility, viability and applicability of this teaching model are raised widely in the teaching community. As such, this paper will attempt to clarify and analyze the principles and aspects of student-centered learning through the most frequently asked questions pertaining to this issue.

What is student-centered learning?
Simply put, student-centered learning is a model wherein students are placed at the core of the learning process. As such, students’ needs, opinions, backgrounds, and goals are acknowledged and incorporated within the learning environment. In this model, teachers are guided by what is best for the students when helping them to learn or make decisions.

The concept of student-centered learning derives from several models. It first evolves out of the constructivist learning theory which asserts that knowledge is constructed uniquely and individually in multiple ways (Vygotsky, 1978, cited in Bush & Saye, 2000). It also derives from the experiential model in which teaching is seen as transformation of existing knowledge (Kohonen, 1992) and the active learning model which suggests that all learning activities involve some kind of experience or some kind of dialog such as dialog with self and dialog with others (Fink, 2002).

What are the characteristics of student-centered learning?
On the basis of the modes from which it derives, student-centeredness entails these characteristics:

- The focus is on active learning, using an integrated approach to connect new learning to prior learning, stimulating interest and relevance, providing student choice and control, adapting to individual developmental differences, and providing a caring and supportive learning environment (Bansberg, 2003).
- Knowledge is constructed through authentic learning. It is learnt in real context or the context in which it was first generated. In other words, it links school learning experiences to real world situations.
- Students are active participants in the learning process rather than passive recipients. They have opportunities and increased responsibilities to identify and
self-direct their own learning needs, locate learning resources, and construct their own knowledge based on those needs.

- Class activities and project work are arranged differently to allow learners a variety of choices to select according to the needs of each student. This results from the notion that students have different capabilities and preferences for learning modes and strategies.

- The learning environment, where learning may take place anywhere, at any time, in many forms and by diverse means, is created. Such a learning environment enables students to be responsible for and involved in their education. As such, students are provided with substantive out-of-classroom activities that increase students’ learning in a number of dimensions.

- Students are motivated more intrinsically (self-motivation) than extrinsically (external motivation). Simply put, students are motivated from within not from without. For example, they type a written assignment because they take pride in their work not because they want people to admire or approve of it.

Why switch to this new model? What is the problem with the traditional method?

To answer these questions, we need to look back to analyze the nature of the traditional teacher-centered approach, and its outcome on learners to see why a student-centered approach should be promoted as an alternative.

The teacher-centered approach, influenced by the transmission model, affirms that knowledge is something that can be transmitted from teachers to students, like a two-dimensional learning of teacher to student instruction. In a classroom, a teacher is the person in authority whose job is to impart knowledge and skills, evaluate and correct the learners’ performance according to the criteria he/she has set. The students are relatively passive recipients of knowledge, and expect the teacher to be totally in charge of their learning. As such, the typical pattern of classroom interaction in this transmission model is IRE—teacher Initiation, student Response, and teacher Evaluation (Mehan, 1979). In the IRE pattern, teachers are always at the front of the room, providing knowledge, asking students to demonstrate knowledge previously taught, and evaluating the students’ responses and performance.

This teacher-centered practice is deeply rooted in Thai society, wherein “hierarchy” lies as a central value. Since Thais place an emphasis on the vertical respect relation and submission to authority (Williams, 1980), teachers, who have a much higher status than students, are regarded as the second parents whose mission is not only to impart knowledge but to teach morals and mold the students to be good citizens in society as well. The image that is generally assigned to a teacher is that of a “righteous guru” who possesses great knowledge. As such, it goes without saying that in the learning process, the teacher, not the learner, is placed right at the center.

In view of these two factors, the hierarchical pattern of society and the transmission model of education, we can understand more clearly why Thai teachers need to maintain their “righteous guru” image through the use of teacher-front orientation and the IRE pattern. Unfortunately, however, such teaching practice has a major downside, for it has shaped learners to be passive recipients who merely listen, memorize, and absorb the information transferred by the guru rather than to initiate or negotiate the outcome of the learning process. Students are not trained to exercise their analytical, critical, and reflective thinking. Much worse, this education system does not prompt students to become independent learners who recognize that knowledge is constructed in many ways, see the value of learning, realize that learning is a life-long process, and understand that there’s no one else but themselves be responsible for their own learning.

To keep abreast with the rapidly changing world of information and the economy that requires critical thinking, we need to empower the students. We need to enable them to think critically and independently, and be responsible for and involved in their learning. Students need to be self-directed and become active players in the academic learning enterprise. On all these accounts, it is time to advance from two-dimensional teacher-to-student instruction to three-dimensional student-centered learning where students and teachers are involved in project work. According to Watanabe (1999), the latter can “allow for a depth in the learning process through the students and teachers active participation in the learning process—a participation that allows for an unlimited amount of creativity” (p. 1).

How can student-centered learning be implemented?

As mentioned earlier, the teacher-centered model has long been the focus of our education system. Therefore, in an attempt to implement the student-centered approach, the first thing that needs to be done is to reconceptualize teaching and learning. The traditional concept—that emphasizes knowledge as the object to be transmitted, teaching as the presentation of knowledge, and learning as its absorption—must all be reformed. We need to implement a new conception that views knowledge as something that can be constructed, teaching as a means to provide an environment that is most conducive to learning, and learning as the process of learning how to learn. Based on the new concept,
teachers and students need to modify their new roles to fit the learning process. These can be outlined as follows:

**The Role of a Teacher**

The teacher’s role, in a student-centered classroom, is much more crucial and valuable than that of the teacher-centered orientation. The teachers need to:

- Change from the role of authority and presumed expert who possesses all knowledge to become a facilitator who provides a setting in which the students can play an active and inquiring role in their own learning.

- Create a learning environment that stimulates and challenges learners, fosters critical thinking and the process of knowledge construction. For example, teachers can enhance the thinking skills of learners through doing such activities as reasoning, decision making, reflecting, making inferences and problem solving. These types of activities encourage students to engage cognitively and emotionally with the learning tasks. The latter activity, especially, can be done by building an environment that allows students to examine complex problems using a wide variety of resources, develop their own strategies for addressing these problems, and present and negotiate solutions to these problems in a collaborative manner.

- Promote collaborative learning. Collaboration among students is an integral component of the student-centered approach. Working as a team, according to Kohonen (1992), can create a positive interdependence and individual accountability among learners as each member attempts to contribute to the team product and thus is in charge of helping his/her teammates to learn. Collaboration can also foster learners’ growth, develop social and learning skills, and help them construct their own knowledge through engaging in the exchange of ideas.

- Recognize the individual differences in approaches to learning. Teachers should set multiple tasks and give choice to learners to select and sequence their own activities independently.

- Reinforce the idea that the source of knowledge is not confined within the walls of a classroom, but may also be discovered outside. Some examples of sources of knowledge include parents, elders, libraries, museums, historical sites, authentic materials, and the Internet.


- Draw from different disciplines to integrate learning experiences and more importantly, use team teaching to achieve integrated learning outcomes. For example, when teachers with different expertise like tourism and biology work together, they can interchange the concepts in different subjects to teach generally about the environment.

- Draw the relation between the students’ prior knowledge and experiences to the new learning. This is based on the notion that the learning experiences that relate to students’ personal knowledge and experiences are the most easily learnt and often the most difficult to forget.

**The Role of a Student**

In a similar vein, students play a significant role in the learning process. They no longer view themselves as empty vessels waiting to be filled. Instead, they need to:

- Change from the old belief “knowledge is to be transmitted by teachers” to the new understanding “knowledge is to be constructed,” and be aware that students are responsible for constructing their own personal knowledge.

- Change from merely being passive recipients to taking part as active participants who are engaged in all aspects and activities of their learning (both cognitively and physically) that are generally the duty of the teacher in most traditional learning activities.

- Set meaningful goals for completing the learning activity, assume more responsibility for meeting those goals, and monitor their progress in order to determine if the strategies they are using to accomplish their goals are effective (Glassglow, 1997).

**Is the use of technology an integral component in student-centered learning?**

There is no doubt that in the 21st century, technology is increasingly important. Not only does it affect the way we live, the way we conduct business, the way we communicate with one another, but also the way we teach and learn. According to Tsang-Kosma (2003), the business world
demands schools to prepare graduates who are skilled at working in teams, can effectively solve problems, are able to process and apply information, and more importantly, can use technology effectively in order to maximize productivity. As such, the challenges and educational goals for schools should focus on creating the learning environment that incorporates technology as well as fosters the needed skills to empower students. If integrated properly, technology such as audio, dynamic visual formats, computers, and the Internet will enrich the learning environment by using them effectively as a medium of instruction or a tool to enhance student learning. Some merits of technology, as outlined by NCREL (2003) are highlighted here:

- Technology can change the learning context from teacher-centered to learner-centered activities, giving students more control of content, creating a more collaborative learning environment, and providing different ways of accessing information and communicating with people. Many interactive software programs can lend themselves well to learner-centered instructional approaches.

- Technology provides hands-on, minds-on activities—those that engage students’ physical as well as mental skills to solve problems. The activities can increase students’ fluency with given content, strengthen basic skills, help students acquire higher-level proficiencies, increase the relevancy of instruction to students’ lives, provide interactive feedback about their performance, and most of all, motivate students. For example, the use of electronic books, often on CD-ROM, can turn reading from a static, print-based activity into an exciting, interactive experience.

- Technology, particularly the Internet, is a tool well-suited to learning. It provides an ideal learning environment that allows anyone to learn by doing, to receive feedback, to refine understanding, to build new knowledge, and to reflect (“Preparing Tomorrow’s Teachers,” 2003).

What difficulties can arise in the implementation of student-centered learning?

The difficulties that may arise from implementing this innovative model include:

- Some teachers resist changing their old beliefs and usual teaching practices. Such resistance may occur from the deeply rooted “righteous guru” or “impartor of knowledge” image fixed in their head. These teachers view themselves as the authorities whose mission is to teach, direct, instruct, and control students. Therefore, they may fear doing things differently; they may see the change as a threat to their status and profession.

- A number of teachers are not willing to implement the approach, for they perceive that the way they teach is already the best and thus there is no need to change. Since these teachers opt to use only one way or method that they feel works best, they are not open to new ideas or other possibilities.

- Some teachers are in a rush to implement the approach without a thorough understanding of the principles and a careful plan of teaching. These teachers are too eager to make changes and do not take into consideration the culture and realities of their classroom situation.

- Some teachers lack the knowledge and skills to incorporate technology into their own teaching. Unfortunately, many teachers know very little about computers and are not interested in learning; while others may try to seek new uses for technology in the classroom but do not have sufficient technical support. These teachers see the value of technology but they feel frustrated because they are not trained to use these resources in the classroom setting.

- It may be the case that while many teachers are personally committed to serving students’ needs, the structure of their organization and policies may not accommodate or, in some cases, hinder the desire to be more student-centered.

- Some students reject the approach because they want evidence that they are being taught something. These students, like some teachers cling to the perception that knowledge must be transferred and thus wait for teachers to spoon-feed them.

What results can be indicative success from the implementation of student-centered approach?

The ultimate goal of student-centered learning is to produce self-directed, lifelong learners. This means that the teaching can facilitate students to move from dependency toward autonomy. The success of the implementation of such an approach can be examined from the stages of student development below: (“Steps Toward,” 1996)
Stage one: Dependent learners

Learners, at this very first stage, are dependent on teachers-authorities who impart knowledge, give explicit instructions on what to do, how and when to do it. To students, learning is teacher-centered. Students are not given an opportunity to make choices or exercise control over their learning.

Stage two: Interested learners

At this stage, learners show positive response toward the motivation and guidelines given by teachers. Despite a directive approach, teachers can successfully link content to students’ interests, show high support, and build a good rapport in the classroom community, all of which can reinforce student willingness and enthusiasm.

Stage three: Involved learners

Students, at this level, are much more developed. More and more, they are seeing themselves as participants in their own learning, seeing the value of their own life experiences, and also the value of learning from and with others. Learners respond well to teaching through collaborative learning.

Stage four: Self-directed learners

At this stage, learners can set their own goals, plans, and standards. This gives them a sense of independence in, and responsibility for their learning. Teachers no longer give lectures, but rather act as consultants, monitor student progress, and give feedback in the learning process.

CONCLUSION

Student-centered learning is a model in which students are the focus of the learning process. This model, however, does not mean that teachers will step aside, letting students alone run everything. Rather, it means that teachers, when planning their teaching, will take into consideration the views and needs of students and run the classroom to the benefits of students. It also means that teachers will manage their teaching in the way that makes students feel included, value the educational process, and take control of their own learning.

Implementing a student-centered model is a true challenge for the 21st century. The process of incorporating it into our education system demands hard work and effort from teachers and students alike. The key to the success of implementation requires, on the teacher’s part, a careful study and a thorough comprehension of the model’s principles, as well as a genuine recognition of its value. Through the new understanding, teachers then can change their old beliefs and practices; they can set the new goals and standards, and plan their teaching, taking into account what is best for students. In so doing, teachers can also work on their self and professional development. On the learner part, likewise, students, guided by teachers, need to adopt a new conception of the learning process. They need to realize that if they are to keep pace with the rapidly changing world, and to compete in the global market place that has a growing demand for educated workers with skills in critical thinking, problem solving and decision making, they must change their long-time practice from passive to active learners. They need to empower themselves, gain control over their learning, and become autonomous learners. Finally, it is hoped, teachers and students working in collaboration, can gradually make the learning environment more productive and worthwhile.

REFERENCES


Asst. Prof. Chutima Thamraksa received her Ph.D. (English, Rhetoric and Linguistics) from Indiana University of Pennsylvania, U.S.A., M.A. (English for Non-Native Speakers), Certificate (TESL) from Central Missouri State University, U.S.A., and B.Ed. (English) from Chulalongkorn University. She is currently the Chairperson of the English Department, School of Humanities, Bangkok University. Her publications include three textbooks: Exploring through Writing: An Advanced Rhetoric; Report Writing; Critical Reading, and an article on “Virtual Schooling: A Technological and Educational Revolution.”
of demystifying held research myths. Neither is it my purpose to highlight problems in others’ research, or to foreground a pessimistic perspective about some of their research practices. Thus, for example, master’s and doctoral students learn to relate to scholarly literature and look critically at their work by attending college or departmental seminars. They also discuss their own work with practitioners or fellow researchers and present their ideas at conferences in paper or poster presentation formats to increase the strength of their studies. This myth falls under the classification of conceptual misconceptions as it relates to how young researchers understand the concept and the meaning of research. Is research reflective practice? Or is it more than that? 1. Myth: Machine Learning is Artificial Intelligence. We need to put a filter on the hype that ML is AI, and we need to wrangle the misconceptions in the same way a data scientist wrangles data features, choosing the useful from the ambiguous. In this ByteScout article, we are going to technically evaluate the realistic limitations of ML. A straightforward study of both the central nervous system and artificial neural networks lead inexorably to ML demystified! Reality: Not Even Close. If you read carefully between the lines of Big Data stories, you will find people like Andrew Ng stating soberly that AI now is mostly old regression techniques repackaged with faster computers and larger datasets. centred learning as focusing on the students’ learning and what students do to achieve this, rather than what the teacher does. Other authors articulate broader, more comprehensive definitions. Lea et al. (2003:322) summarises some of the literature on student-centred learning to include the following tenets: 1. the reliance on active rather than passive learning