การจัดการเรียนการสอนที่เน้นผู้เรียนเป็นสำคัญ

น้ำฝน คูเจริญไพศาล*

บทคัดย่อ

การจัดการเรียนการสอนที่เน้นผู้เรียนเป็นสำคัญมีจุดมุ่งหมายเพื่อส่งเสริมกระบวนการเรียนรู้ ของผู้เรียนโดยการสร้างสรรค์สิ่งแวดล้อมทางการเรียน กระตุ้นให้ผู้เรียนมีส่วนร่วมในกิจกรรมการเรียนรู้ ส่งเสริมสนับสนุนให้ผู้เรียนสามารถสร้างความรู้ได้ด้วยตนเอง และเพื่อการเรียนรู้ตลอดชีวิต จุดประสงค์ ของการเรียนด้วยวิธีที่เน้นผู้เรียนเป็นสำคัญไม่ใช่เพื่อการท่องจำข้อมูลเพื่อให้สอบผ่าน การเรียนด้วยวิธีนี้จะ เน้นที่เนื้อหาวิชาและกิจกรรมที่เกี่ยวข้องและเป็นประโยชน์ต่อชีวิตของผู้เรียน เป้าหมายของการเรียนรู้ คือ เพื่อความเข้าใจมากกว่าการจดจำข้อเท็จจริงที่อาจจะไม่ได้เกี่ยวข้องกับชีวิตของผู้เรียนเลย

คำสำคัญ: การจัดการเรียนการสอนที่เน้นผู้เรียนเป็นสำคัญ

ภาควิชาวิทยาศาสตร์ทั่วไป คณะวิทยาศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ

 $^{^{*}}$ ผู้นิพนธ์ประสานงาน, e-mail: numphon@swu.ac.th

The Learner-Centered Instruction

Numphon Koocharoenpisal*

ABSTRACT

The learner-centered instruction aims to enhance the learning process of the learners by creating a learning environment, encouraging learners to participate in learning activities, promoting learners to be able to construct their own knowledge and to become life long learners. The purpose of learning in the learner-centered approach is not just memorizing information to pass examinations. Learning now focuses on subjects and activities that are relevant and useful to the lives of learners. The goal of learning is understanding rather than just memorizing facts that may have no connection with the learners' lives.

Keywords: learner-centered instruction

Department of General Science, Faculty of Science, Srinakharinwirot University

^{*}Corresponding author, e-mail: numphon@swu.ac.th

Introduction

In traditional instruction, often called teacher-centered education, the teacher was the center of the classroom. Teacher's primary functions are lecturing, designing assignments and tests, and grading. The teacher usually used "chalk and talk" or other methods of teaching in which the teacher was active and the students passive. The teacher either wrote notes on the board while the students passively copied the notes in their exercise books or the students memorized the information directly from their textbooks. When the teacher asked questions, the students were usually just asked to recall or repeat information from the lecture or from the textbook.

In this kind of instruction there is little time for practical activities, discussions, group work, experiments or other alternative methods. Since the emphasis is on memorizing of information, there was not time for activities. In the learner-centered instruction, the students are not passive recipients of knowledge. They are active learners. Teachers provide students with opportunities to learn independently and coach them in the skills they need to do effectively. Many researches have described a wide variety of learner-centered instructional methods and have offered demonstrations that properly implemented learner-centered instruction where increased motivation to learn, greater retention of knowledge, deeper understanding, and more positive attitudes toward the subject being taught [1, 2].

The purpose of learning in the learner-centered approach is not just memorizing information to pass examinations, although passing examinations is obviously important. Learning now focuses on subjects and activities that are relevant and useful to the lives of students, things that they can connect with and use in their own lives. The goal of learning is to understanding and making the world meaningful rather than just memorizing facts that may have no connection with the learners' lives.

The students have roles in the learner-centered instruction; they are not passive recipients of knowledge. They are active learners. Although they receive and memorize information from the teacher and textbooks, they do much more than this. Learner-centered instruction encourages students to take responsibility for their own skill development. Teachers' role in the learner-centered approach is different from the traditional one; teachers are not only to give information, but to organize the activities from which students will gather or use information, to guide them through these activities, to help them find additional sources of information, to make sure they are really thinking and analyzing, to check their progress regularly, to make sure all students are learning, and to give help when students do not understand [3].

The Learner-Centered Approach

McCombs and Whisler (1997) [4] identified the definition of learner-centered as: The perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners). (p. 9)

In the learner-centered approach, "learners are closely involved in the decisionmaking process regarding the content of the curriculum and how it is taught" [5]. It is also referred to as a student-centered or child-centered approach involving collaboration between teachers and learners; through ongoing dialogue, they determine the content of the curriculum and the learning objectives. This approach focuses on learners' real-life needs; learner responsibility in setting personal and realistic goals and determining the steps toward achieving those goals; flexibility-as students progress and reflect on their learning, content and goals may be modified; and learner self-assessment.

McCombs (2000) [6] pointed out that the learner-centered framework focuses on:

• The Learner and each learner's perceptions, needs, and motivation

• Learning Opportunities and the types of teaching and learning experiences that can meet learner needs for success, belonging, and autonomy

• Learning Outcomes that include affective, cognitive, social, and performance domains

• The Learning Context or climate for learning, including expectations, teacher and technology support, time structures for collaboration, learning partnerships and mentoring relationships, and adaptability to student needs.

Learner-Centered Curriculum

The concept of a learner-centered curriculum should be based not on separate subjects but rather on the emerging world of the learner. The important issues for proponents of this organization are the interests, needs, problems, and concerns of the learner [7]. The curriculum establishes the learner as the most significant and essential person in the teaching-learning process. Learner-centered means: making student goals the focus of instructional design. Learner-centered classroom reverses the traditional pedagogical structure of teacher lecturing to a group of students. In learner-centered approach, learners have the opportunity to explore, gather and generate meaning from their educational experiences while a teacher acts as a guide, and a participating learner, in the educational setting. Learner-centered curriculum development differs from traditional curriculum development methods, in which the planning process takes place in advance without student input, and a lockstep order for instruction and evaluation is followed. A learner-centered curriculum uses learners' background knowledge and experiences as a starting point for curriculum development by emphasizing a collaborative effort between teachers and learners, characterized by ongoing dialogue to determine the content and learning objectives for the course. One of the major assumptions underlying the learner-centered philosophy is that, given the constraints that exist in most learning contexts, it is impossible to teach learners everything they need to know in class [5].

In consequence, teaching goals emphasize on development of learning skills as following:

- to provide learners with efficient learning strategies
- to assist learners to identify their own preferred ways of learning
- to develop skills needed to negotiate the curriculum
- to encourage learners to set their own objectives
- to encourage learners to adopt realistic goals and time frames
- to develop learners' skills in self-evaluation.

Learner-Centered Psychological Principles

The American Psychological Association (APA) (2003) developed a 14 learnercentered psychological principles pertaining to the learner and the learning process (see Table 1). The 14 principles are divided under four factors: Cognitive and Matacognitive Factors, Motivational and Affective Factors, Developmental and Social Factors and Individual Differences Factors.

Meece (2003) examined the use of the Learned-Centered Psychological Principles (LCPs) for improving the academic engagement and learning of middle school students. Using survey data from 2,200 middle school students from diverse communities across the United States, the findings indicate many important motivational benefits of learner-centered practices for young adolescents. Specifically, students reported more positive forms of motivation and greater academic engagement when they perceived their teachers were using learner-centered practices that involved caring, establishing higher order thinking, honoring student voices, and adapting instruction to individual needs. Additionally, students' perceptions of learner-centered practices were also positively related to teachers' ratings of their classroom performance. These results identified many important benefits of learner-centered practices for students [2].

Table 1 The learner-centered psychological principles [8]

Cognitive and Matacognitive Factors

Principle 1. Nature of the learning process.

The learning of complex subject matter is most effective when it is an intentional process of constructing meaning from information and experience.

Principle 2. Goals of the learning process.

The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representations of knowledge.

Principle 3. Construction of knowledge.

The successful learner can link new information with existing knowledge in meaningful ways.

Principle 4. Strategic thinking.

The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals.

Principle 5. Thinking about thinking.

Higher order strategies for selecting and monitoring mental operations facilitate creative and critical thinking.

Principle 6. Context of learning.

Learning is influenced by environmental factors, including culture, technology, and instructional practices.

Motivation and Affective Factors

Principle 7. Motivational and emotional influences on learning.

What and how much is learned is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests, goals, and habits of thinking. **Principle 8. Intrinsic motivation to learn.**

The learner's creativity, higher order thinking, and natural curiosity all contribute to motivation to learn. Intrinsic motivation is stimulated by tasks of optimal novelty and difficulty, relevant to personal interests, and providing for personal choice and control.

Principle 9. Effects of motivation on effort.

Acquisition of complex knowledge and skills requires extended learner effort and guided practice. Without learners' motivation to learn, the willingness to exert this effort is unlikely without coercion.

Developmental and Social Factors

Principle 10. Developmental influences on learning.

As individuals develop, there are different opportunities and constraints for learning. Learning is most effective when differential development within and across physical, intellectual, emotional, and social domains is taken into account.

Principle 11. Social influences on learning.

Learning is influenced by social interactions, interpersonal relations, and communication with others.

Individual Differences Factors

Principle 12. Individual differences in learning.

Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity.

Principle 13. Learning and diversity.

Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account.

Principle 14. Standards and assessment.

Setting appropriately high and challenging standards and assessing the learner as well as learning progress including diagnostic, process, and outcome assessment are integral parts of the learning process.

Characteristics of Learner-Centered Classrooms [4]

McCombs and Whisler (1997) pointed out characteristics of learner-centered classrooms as follows:

In learner-centered classroom, the students

- Choose their own projects
- Work at their own individual pace
- Show excitement about learning new things
- Demonstrate their knowledge in unique ways
- Are actively engaged and participating in individual and group learning activities
- Do beyond minimal assignments

In learner-centered classrooms, the teachers

- Make it clear that he/she has high expectations for all students
- Listens to and respects each students' point of view
- Encourages and facilitates students' participation and shared decision making
- Provides structure without being overly directive
- Encourages students to think of themselves
- Emphasizes student enjoyment of activities
- Helps students refine their strategies for constructing meaning and organizing content

In learner-centered classrooms, the instructional strategies and methods

- Use time in variable and flexible ways to match student needs
- Include learning activities that are personally relevant to students
- Give students increasing responsibility for the learning process
- Provide questions and tasks that stimulate students' thinking beyond rote memorizing
- Help students refine their understanding by using critical thinking skills
- Support students in developing and using effective learning strategies
- Include peer learning and peer teaching as part of the instructional method

In learner-centered classroom, the curriculum

- Features tasks that stimulate students' varied interests
- Organizes content and activities around themes that are meaningful to students
- Has explicit built-in opportunities for all students to engage their higher-order thinking and self-regulated learning skills
- Includes activities that help students understand and develop their own perspectives
- Allows learning activities that are global, interdisciplinary, and integrated
- Encourages challenging learning activities, even if students have difficulty

- Features activities that encourage students to work collaboratively with other students In learner-centered classrooms, **the assessment system**
- Assesses different students differently
- Includes student input in design and revision
- Monitors progress continually in order to provide feedback on individual growth and progress
- Provides appropriate opportunities for student choice of types of products for demonstrating achievement of educational standards
- Promotes students' reflection on their growth as learners through opportunities for self-assessment
- Allows diversity of competencies to be demonstrated in a variety of ways

In the learner-centered classroom, the teacher is not less important than in the teachercentered classroom. In fact, the teacher is much more important in a learner-centered classroom. Teacher's role is not only to give information, but to organize the activities, which students will gather or use information, guide the students through these activities, help them find additional sources of information, make sure they are really thinking and analyzing, check their progress to make sure all students are learning, and give help when students do not understand.



Figure 1 The learner-centered process [9]

Figure 1 demonstrate that within a learner-centered process, students can create infinite combinations of people, opportunities, and information within the confines of finite resources.

An education process that pushes students to the center changes the teacher's role to one of facilitator, guide, and coach. It places emphasis on students as active participants in the process of finding, organizing, analyzing, and applying information in novel ways to solve problems. Students become part of a learning community where they collaborate to discover information from a variety of sources, including peers, teachers, experts, real-world data, simulations, and experiences. Ultimately, they apply that information in novel ways to solve problems, communicate ideas, and continuously add to their knowledge base [9].

The Comparison between Learner-Centered and Teacher-Centered Instruction [10]

Huba and Freed (2000) have compared the difference of Teacher-Centered Paradigm to Learner-Centered Paradigm as shown in Table 2.

A Model for Designing Learner-Centered Instruction

The processes of teaching, learning and the design of instruction are interrelated. The table 3 presents a summary of current educational research in terms of the characteristics of learning and how instructional design and the role of the instructor can take these characteristics into account.

Assessment in the Learner-Centered Classroom

Assessment is the part of the learning-teaching process, embedded in class activities and in the interactions between learners and teachers. Assessments are integrated with instruction rather than separate from it. Weimer (2002) have pointed out that assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences. [11]

Any of the following practices can also support learners and be used for assessment.

- Encouraging students to formulate questions about their understanding
- Classroom activity that helps students practice reasoning with concepts
- Classroom activity that relates facts to concepts.
- Practicing transfer or extension to other problem contexts or kinds of activities.
- Classroom activities that call for students to articulate their explanations or reasoning
- Experimental, hands-on learning situations where the activity is related to larger concepts
- Student creation and design of experiments or other hands-on learning

Teacher-Centered Paradigm	Learner-Centered Paradigm
Knowledge is transmitted from teacher to	Students construct knowledge through
students.	gathering and synthesizing information and
	integrating it with the general skills of
	inquiry, communication, critical thinking,
	problem solving, and so on.
Students passively receive information.	Students are actively involved.
Emphasis is on acquisition of knowledge	Emphasis is on using and communicating
outside the context in which it will be used.	knowledge effectively to address enduring
	and emerging issues and problems in
	real-life contexts.
Teacher's role is to be the primary	Teacher's role is to coach and facilitate.
information giver and primary evaluator.	Teacher and students evaluate learning together.
Teaching and assessing are separate.	Teaching and assessing are intertwined.
Assessment is used to monitor learning.	Assessment is used to promote and diagnose
	learning.
Emphasis is on right answers.	Emphasis is on generating better questions
	and learning from errors.
Desired learning is assessed indirectly	Desired learning is assessed directly through
through the use of objectively scored tests.	papers, projects, performances, portfolios, and
	the like.
Focus is on a single discipline.	Approach is compatible with interdisciplinary
	investigation.
Culture is competitive and individualistic.	Culture is cooperative, collaborative, and
	supportive.
Only students are viewed as learners.	Teacher and students learn together.

 Table 2
 Comparison of teacher-centered and learner-centered paradigms [10]
 [10]

Source: Adapted from Huba, M. E. and Freed, J. E. 2000. Learner-Centered Assessment on College Campuses, Shifting the Focus from Teaching to Learning. MA: Allyn and Bacon, p. 5.

Learning	Design of Instruction	Teaching
Is active	Design activities that involve	Actively engage students by
It requires purposeful	students wholeheartedly in the	developing meaningful activities
processing.	learning process.	for which they need the curriculum.
Is constructive	Design activities that build on	Help students construct powerful,
New learning is built	students' current knowledge and	organizing concepts that they
upon existing knowledge.	that encourage the understanding	can use to reach more complex
	of relationships.	levels of understanding.
Is individualized	Design activities that allow	Provide various explanations and
Learning is unique because	various student strengths to be	roads to understanding so students
of its relationship to past	developed and that encourage	can build on their own previous
knowledge and experience.	students to see connections	understandings.
	between their studies and the	
	rest of their lives.	
Is contextual	Design activities that reflect	Provide a classroom context that
What is learned is dependent	real world situations that	guides students in thinking "outside
upon the context in which	students will encounter when	the classroom" and asks them to
it occurs.	they leave the classroom.	continually consider how subject
		matter can be related to real life
		issues and problems.
Takes time	Design activities that require	Develop activities that allow
Learning involves many	both time and practice spent on	flexible time commitments to
hours of assimilating,	the kinds of learning outcomes	mastery and that build on students'
restructuring, and practicing	you wish students to achieve.	previous course and life experiences.
with guidance.	Guide them as they work.	

Conclusions

Learner-centered instruction provide educational experiences that emphasize learners' knowledge as well as their physical, psychosocial, and cognitive development and also focus on the significance of learner, learners' real-life needs; learner responsibility, motivations, past experiences, background knowledge, and interests. The application of the learner-centered approach helps teachers develop schemes of work and use new teaching and learning strategies and assessment methods for classroom activities that develop critical thinking.



Figure 2 Teacher-Centered Instruction



Figure 3 Learner-Centered Instruction

Learner-centered instruction prepares students to become life long learners by engaging them to seek knowledge by themselves. In addition, teaching based on learner-centered approaches promotes students' use of various learning skill such as reading, writing, thinking, gathering data, analyzing data and presenting data as well as working in group and using communication skill with each other.

References

- Felder, R. M., and Brent, R. 1996. Navigating the Bumpy Road to Student-Centered Instruction. Available from URL: http://www.ncsu.edu/felderpublic/Papers/Resist.html. 14 April 2008.
- 2. Meece, J. L. 2003. Applying Learner-Centered Principles to Middle School Education. *Theory into Practice* 42(2): 109-116.
- Elizabeth, L. 2008. Learner-Centered Teaching, Active Learning and Group Work in the Classroom for Effective Teaching and Learning. Available from URL: http://www. besoproject.org/pdf%20files/ LEARNER. pdf. 17 September 2008.
- 4. McCombs, B. L., and Whisler, J. S. 1997. The Learner Centered Classroom and School: Strategies for Increasing Student Motivation and Achievement. San Francisco. Jossey-Bass. p. 65-66.
- 5. Nunan, D. 1988. The Learner-Centered Curriculum. New York. Bell & Bain Ltd, p. 2-7.
- McCombs, B. L. 2000. Learner-Centered Psychological Principles: A Framework for Technology Evaluation. Invited paper presented at the U.S. Department of Education's Regional Conferences on "Evaluating Technology in Education" Atlanta.
- Beane, J. A., Toepfer, C. F., and Alessi, S. J. 1944. Curriculum Planning and Development. Boston. Ally and Bacon. p. 60.
- 8. American Psychological Association [APA]. 2008. Learner-Centered Psychological Principles. Avalable from URL: http://www.apa.org/ed/lcp2/lcp14.html. 9 October 2008.
- Smith, K. L. 1997. Preparing Faculty for Instructional Technology: From Education to Development to Creative Independence. Available from URL: http://net.educause. edu/ir/library/html/cem/cem97/cem9739. html. 3 June 2008.
- 10. Huba, M. E., and Freed, J. E. 2000. Learner-Centered Assessment on College Campuses, Shifting the Focus from Teaching to Learning. Needham Heights, MA. Allyn & Bacon.
- 11. Weimer, M. G. 2002. Learner-Centered Teaching: Five Key Changes to Practice. San Francisco. Jossey- Bass.

ได้รับบทความวันที่ 4 พฤศจิกายน 2551 ยอมรับตีพิมพ์วันที่ 6 มกราคม 2552