Student Centered Learning as a Learning Model in the Classroom to Make Transform a Critical Pedagogy

Teofilus Ardian Hopeman[(✉)], Dian Nasrudin, and Muhamad Sandi Hidayat

Elementary Teacher Education, Nusa Putra University, Sukabumi, Indonesia
{teofilus.ardian,dian.nasrudin_pgsd20,
muhamad.sandi_pgsd20}@nusaputra.ac.id

Abstract. The learning process in the 21st century is designed in such a way as to facilitate students in learning. Through student-centered learning found 5 learning methods that suit student learning styles, including: Virtual Learning, Problem Based Learning, Project Based Learning, Challenge, Debate, Indicator Review, Expert Consultation, Paper Based Drill. The learning method is believed to represent the learning style found in students. The center of this learning is that students and teachers only function as facilitators. This learning is a learning that prioritizes the development of students' individual abilities in learning and finding something new. The center of their learning is in the classroom and wherever they study.

Keywords: Learning Process · Critical Pedagogy · Critical Thinking · Student Centered Learning

1 Introduction

A. *Learning Process*

In the 21st century, the learning process has undergone many changes and shifts from what existed before. The change from traditional learning to modern learning. The traditional learning process itself has begun to be abandoned by many schools because it is considered unable to meet future educational needs [1]. One of the traditional learning models is the teacher as a learning center. In a teacher-centered learning process, students cannot develop their personal abilities and also cannot meet their educational needs [2].

In its development, society's need is so that their children who are in school [3] can compete in work and can use their knowledge to solve existing problems and face challenges in the life to come [4]. Basically the task of a teacher in the learning process is to prepare students to be able to solve problems, apply the knowledge they have, collaborate and enable students to learn all the time.

Cantor reveals that it is not only the learning process that affects students' abilities, but more influential things, namely emotional abilities and cognitive abilities [4]. Most

Table 1. THE DIFFERENCES BETWEEN TEACHER

Teacher (traditional method)	Facilitator
Say	Ask
Teaching from the front	Support from behind
provide answers in accordance with the predetermined curriculum	provide guidance and create a suitable environment for students to arrive at their own answers and conclusions
mostly give monologues	in continuous and interactive dialogue with students

teachers forget this. They tend to think that students' cognitive abilities themselves are factors that can be influenced and do not depend on [5]. The 21st century learning process is very synonymous with the development of students' individual abilities. Through 21st century learning, students are expected to be able to learn independently and not completely depend on their teachers. In this case the teacher only functions as a facilitator [6]. The teacher's role as a facilitator in this learning process is one of the social constructivist processes [7].

More clearly the opinion expressed by Rhodes and Belly [8]. They make some distinctions between teachers and facilitators (Table 1).

In the learning process, students' learning styles only consist of 4 parts, namely visual, auditory, reading/writing, kinesthetic or what is more often called VARK [9].

B. *Critical Pedagogy*

Because it is a requirement for achieving equity and social justice, critical educators and educational theorists contend that the development of democratization, liberation, and transformative education is crucial [10]. Critical pedagogy is defined by Giroux and as a method of assessing what people know and how they know it, as well as the degree to which social structures influence knowledge formation [11]. Critical pedagogy pioneer Freire first used the term "scientification" in 1970 to describe the process of "learning to grasp social, political, and economic discrepancies in order to build links with the elements of reality" (p. 35). Freirean pedagogy's main component is its critique of banking educational methods, which include storing knowledge in students' minds before asking them to express their ideas (called teacher centered) [12].

In addition, Freire proposes a problem-solving method that encourages students to become proactive, conscientious agents of social change while they learn. He claimed that in order for education to be a free practice, students must take the role of subjects rather than objects of social change. As a result, critical communication pedagogy mandates that instructors (teachers) study, evaluate, and examine the effects of racism, sexism, and other forms of oppression on students' lives in the classroom in the context of a larger sociocultural setting [13].

Critical Pedagogy is a concept which was developed to change the way teachers view their knowledge of teaching strategies. With critical pedagogy, it is hoped that the ability of teachers in the teaching and learning process can develop and change in a
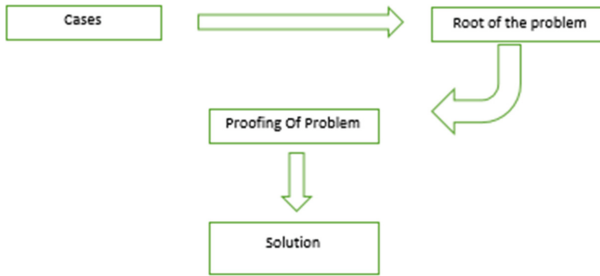
Fig. 1. Critical Thinking Flow

direction that is not monotonous. It is hoped that every teacher will be able to construct their teaching abilities, and use student-centered learning strategies (Student Centered Learning).

C. *Critical Thinking*

Along with the development, students' thinking skills must also be improved. If in the past most students acted as active listeners and depended on the teacher, now students must be able to think critically and live independently. Critical thinking itself means all the skills needed to recognize, analyze and evaluate arguments [14].

Critical thinking is also a thinking skill that must be possessed by a student and they must be responsible for their thinking because their thinking depends on criteria, self-correcting, and sensitive to context [15]. The necessity to have critical thinking skills makes students become human beings who have high thinking skills followed by good analytical skills, reasonableness in thinking and the ability to reflect on a problem. A student who has critical thinking must also be able to assess, choose, decide, justify, debate, verify and discuss a problem that is being analyzed according to his cognitive abilities.

Critical thinking skills also cannot appear suddenly, critical thinking can be stimulated through student social activities. The more often students face a problem and are asked to solve the problem in their own way and compare with the solutions of others, the more their thinking skills will be honed. Based on the above definition of critical thinking above, the following conclusions can be drawn (Fig. 1).

2 Methodology

This research using literature review as the methodology research. It's possible to us to get a simple information.

3 Result and Discussion

A. *Student Centered Learning*

Based on 21st century learning which requires students to be able to communicate, collaborate, be creative, and think critically or better known as 4C. At this time, learning that used to be teacher-centered has now turned into student-centered learning [16].

The goal of student-centered learning (ACL) is that Student opportunities, obligations, and pursuits are motivated by their interests and points of attraction [17]. Based on the "value of confidence," SCL emphasizes what students do and why they think they can do it rather than what they do poorly in class [16] (Fig. 2).

Through planning, interacting, and evaluating the learning process, SCL also assists students in understanding their contribution to classroom learning [18]. In this situation, SCL can develop special difficulties for every student. SCL connects students to what arises from their life experiences by assisting them in focusing on themes that are pertinent to their needs, futures, and. When viewed from this angle (SCL), students transform into participants in the learning process who can comprehensively address the variety of interests and learning preferences present in the classroom. Their. Students believe they are capable problem solvers as a result [19].

Student learning styles can also be determined through the MIBT test. Some of the learning styles that students have are called VARK [2], namely:

1. Visual

Students learn best when assisted by photos or pictures;

2. Auditory

Students learn best when assisted by music, sound, rhyme, rhythm, speaking or listening.

3. Reading/writing

Students learn best by reading or writing the material you want to study.

4. Kinesthetic

Students learn best when you can move your body, and/or use your hands and touch. Writing or drawing diagrams is a physical activity that can fall into this category as well.

Then from this learning style, a student can have more than one learning style.

Based on the existing learning styles, the learning methods that students can choose are:

a) Challenge
b) Debate

Fig. 2. Student-Centered Learning Influence and Outcomes (Hansen and Imse, 2016) Ease of Use

c) Expert Consultation
d) Indicator Review
e) Paper Based Drill
f) Problem Based Learning
g) Project Based Lanning
h) Virtual Learning

The five learning methods are representative of students' learning styles. The 8 learning methods were made referring to the Sudbury Valley school, USA. In this school, learning in class is no longer based on teachers but students. At the school there is no such thing as a teacher, lesson schedule, assignments (PR), assessment, and classrooms.

Sudbery Valley School itself frees its students to be able to choose the lessons they want according to the learning methods they have obtained through the MIBT test. The Education Revolution magazine [20] notes that with their method, they can produce graduates who can answer global challenges. This is because their learning process has long been student-centered and not on the teacher and has made the school students become independent individuals and are able to solve their own problems without the help of others.

The SCL in this school itself gives the impression that the school doesn't look like a real school. Student-centered approach (SCL) requires a change in teaching methods. Class activities and orientation can no longer be determined by the teacher. Teachers should consider students' needs and interests and be willing to learn about these changes throughout the semester [16]. Bilimoria and Wheeler provide, through some of their writings, "guidelines for implementing a learning-centered classroom" [21] (p. 410). They suggested that teachers:

(a) reinterpret education as directed by learning; (b) provide opportunities for independent learning; (c) reshaping power relationships in the classroom; (d) adopt a relational learning approach; (e) focus to context, input and learning process; and (f) encourage students to learn for life.

4   Conclusion

Student Centered Learning its current application in the era of the industrial revolution 4.0 is very useful for shaping the personality of independent and critical-thinking students. Through critical thinking in pedagogy, it is hoped that teachers will be able to use different strategies according to the needs needed in the future and construct students' abilities in a sociocultural direction. P21 learning emphasizes four aspects, namely Communication, Collaborative, Critical Thinking, and Creativity. Through this approach, it is hoped that all schools in Indonesia have abandoned the Teacher Centered Learning method.

References

1. C. H. Edwards, Educational change: From traditional education to learning communities. R&L Education, 2011.

2. N. D. Fleming, "Teaching and learning styles: VARK strategies: Christchurch," New Zeal., 2001.
3. M. Vaira, "Globalization and higher education organizational change: A framework for analysis," High. Educ., vol. 48, no. 4, pp. 483–510, 2004.
4. J. A. Cantor, "Experiential Learning in Higher Education: Linking Classroom and Community. ERIC Digest.," 1997.
5. M. H. Immordino-Yang and A. Damasio, "We feel, therefore we learn: The relevance of affective and social neuroscience to education," Mind, brain, Educ., vol. 1, no. 1, pp. 3–10, 2007.
6. B. Brownstein, "Collaboration: The foundation of learning in the future.," Education, vol. 122, no. 2, 2001.
7. H. Bauersfeld, "' Language Games' in the Mathematics Classroom: Their Func-tion and Their Effects," in The emergence of mathematical meaning, Routledge, 2012, pp. 277–297.
8. L. K. Rhodes and G. T. Bellamy, "Choices and consequences in the renewal of teacher education," J. Teach. Educ., vol. 50, no. 1, pp. 17–26, 1999.
9. N. Fleming and D. Baume, "Learning Styles Again: VARKing up the right tree!," Educ. Dev., vol. 7, no. 4, p. 4, 2006.
10. B. Hooks, "Teaching to transgress: Education as the practice of freedom," J. Leis. Res., vol. 28, no. 4, p. 316, 1996.
11. H. A. Giroux, P. L. McLaren, P. McLaren, and M. Peter, Critical pedagogy, the state, and cultural struggle. Suny Press, 1989.
12. P. Freire, "Pedagogy of the oppressed (MB Ramos, Trans.)," New York Contin., vol. 2007, 1970.
13. D. L. Fassett and K. Nainby, "Critical communication pedagogy," in Handbook of Instructional Communication, Routledge, 2017, pp. 248–259.
14. L. F. Schlecht, "Critical thinking courses: Their value and limits," Teach. Philos., vol. 12, no. 2, pp. 131–140, 1989.
15. M. Lipman, "Critical thinking: What can it be?," Anal. Teach., vol. 8, no. 1, 1987.
16. T. A. Conklin, "Making it personal: The importance of student experience in creating autonomy-supportive classrooms for millennial learners," J. Manag. Educ., vol. 37, no. 4, pp. 499–538, 2013.
17. C. A. Estes, "Promoting student-centered learning in experiential education," J. Exp. Educ., vol. 27, no. 2, pp. 141–160, 2004.
18. D. I. Newble and R. A. Cannon, A handbook for medical teachers. Springer Science & Business Media, 2001.
19. E. Aaronsohn, Going Against the Grain. Supporting the Student-Centered Teacher. ERIC, 1996.
20. The Education Revolution (Fall 2000). The Magazine of the Alternative Education Resource Organization. 417 Roslyn Rd., Roslyn Heights, New York.