

Effectiveness of a Student – Centred Instruction on Philippine History Class in developing Higher Order Thinking Skills (HOTS)

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ABSTRACT

Student-centred learning is an approach to education focusing on the needs of the students, rather than those of others involved in the educational process, such as teachers and administrators. This approach has many implications for the design of the curriculum, course content and interactivity of courses. Student-centred learning, that is, putting students' needs first, is in contrast to traditional education, by proponents of "student-centred learning" also dubbed "teacher-centred learning". Student-centred learning is focused on each student's needs, abilities, interests, and learning styles, placing the teacher as a facilitator of learning. This classroom teaching method acknowledges student voice as central to the learning experience for every learner, and differs from many other learning methodologies. Teacher-centred learning has the teacher at its centre in an active role and students in a passive, receptive role. In a teacher-centred classroom, teachers choose what the students will learn, how the students will learn, and how the students will be assessed on their learning. Student-centred learning requires students to be active, responsible participants in their own learning. The results of this study show that Student-Centred Learning Designs and Strategies such as Brainstorming, Problem-Based Instruction, Continuity of learning through own experience, Group Activity, and Interaction were able to develop Higher-Order Thinking Skills (HOTS) of Students in Philippine History Classes. Moreover, the study proved that significant learning is acquired by doing.

Key words: Student Centred, Effectiveness, Instruction, Thinking Skills, Higher Order.

1. INTRODUCTION

Teacher-centred instruction consists of methods, activities, and techniques where the

teacher decides what is to be learned, what is to be tested, and how the class is to be run [1]. Often the teacher is in the centre of the

classroom giving instruction with little input from students. The teacher decides the goals of the class based on some outside criteria [2].

If such instruction is used in Institutions, this of course displays a number of disadvantages, more specifically on the part of the students. Teacher-centred instruction entails that student's work alone. When students work alone, they do not learn how to collaborate or socialize with others. Thus, communication skill is not developed. Such instruction also may become very boring for students. If students get bored, they might miss the important details that their teacher discusses [3]. Moreover, this instruction does not allow students to express themselves, ask questions, and direct their very own learning.

Student-centred learning allows students to actively participate, discover new learning processes and present their effective viewpoints [4]. Students spend the entire course work time constructing and understanding subjects in a proactive way. A variety of hands-on activities are administered in order to promote successful learning [5]. Unique and distinctive learning styles are always encouraged by teachers as well as students. They help in providing varied tools, task and learning-conscious methodologies and creating a better environment for students. With the use of valuable learning skills, students are capable of achieving lifelong learning goals, which can further enhance student motivation in the classroom [5]. Self - determination focuses on the degree to which an individual's behaviour is self-motivated and 'self-determined'. Therefore, when students are given the opportunity to gauge their learning, becomes an

incentive. In being active agents in their learning, students corroborate Rogers' theory that "the only learning which significantly influences behaviour [and education] is self-discovered"[7]. Learning can be seen as a personal growth for students as it encourages them to utilize self-regulation practices. Hence, learning can be constructive in the sense that students are in full control of his /her learning. Over the decades, the teacher acted as a facilitator in a student-centred classroom and this shifted the paradigm of curriculum activities [7].

Today, there are Institutions which have moved toward a student-centred approach. Instead of getting bored with teacher-centred education or losing sight of their goals in a completely teacher-centred classroom, pupils can benefit from the positives of a student-centred instruction.

This study was based from Carl Rogers' theory that the only learning which significantly influences behaviour and education is self-discovery. Researchers saw in this study that knowledge production is vital when providing students the opportunity to explore their own learning styles. In that respect, successful learning also occurs when learners are fully engaged in the active learning process and teachers cater content to specific learning needs.

Generally the objective of the study is to determine whether student-centred instruction is effective in developing Higher Order Thinking Skills (HOTS) on Students in a Philippine History Subject.

Specifically, it aims to meet the following specific objectives:

- To know what are the existing student – centred instructions used in History Classes;
- To find out which one, among the student-centred learning instruction, is commonly adapted by the instructors; and
- To know the significance of a student-centred learning instruction in developing higher orders thinking skills among students.

2. MATERIALS AND METHODS

2.1. Research design

The study focused on determining the effectiveness of various student-centred approaches/designs/strategies used in various courses or subjects being implemented by Philippine History Teachers and Instructors in a room, even when their respective schools still follow a Teacher-Centred Approach.

In accomplishing the study, the proponents used the descriptive method of research. It explores phenomena in real life situations and uses a survey method. Common data gathering methods used are questionnaire, interview, and observation [8].

2.2. Survey

To take a general or comprehensive view of or appraise, as a situation, area of study, etc. The survey was conducted in view to investigate details, especially to inspect, examine, or appraise formally or officially in order to ascertain condition, value, etc. The proponents used this method in collecting all the

information required via questionnaires to reveal summary statistics of the respondents' thoughts.

2.3. Observation

Classroom observations were done on the actual classes of the respondents to determine the particular student-centred approaches and strategies were executed to develop Higher Order Thinking Skills (HOTS) among students.

2.4. Interviews

A purposive gathering of information, in which persons seek to give and get information they are to use to achieve the objectives they formulate for a specific type of activity [9]. Interviews at personal level and via emails were conducted for both respondents and students. Respondents were asked about the actual strategies and activities they give to students which develop Higher Order Thinking Skills. They were also asked to specify the specific details of the HOTS developed. Students, in turn, were also asked to narrate their experiences in a Learner-Centred Environment.

The proponents used the convenience sampling method to determine its respondents. The subjects are selected just because they are easiest to recruit for the study and the researchers did not consider selecting subjects that are representative of the entire population.

Since the proponents are educators themselves, they were able to conveniently distribute questionnaires to a total of 50 respondents which is composed of teachers of various high schools and instructors of Philippine history subject from various schools and institutions

within Cavite. The respondents are those who adapt learner-centred strategies such as brainstorming, problem based-Instruction, metacognitive. 20 respondents are Public High School Philippine History Teachers; 10 Private School Teachers who teach Philippine History; College Instructors of Philippine History of a Semi – Private Institution; and 10 College Instructors of Philippine History of a Private Institution.

The proponents provided an evaluation form and distributed it to the respondents to determine whether the beneficiaries accept the view that HOTS can be developed through the Student-Centred Approach. The survey or questionnaire is patterned after the Likert Scale, which is one of the most commonly used scales in a social science research. Likert typically has the following format Strongly Agree - 5; Agree - 4; Neither Agree nor Disagree - 3 ; Disagree - 2; Strongly Disagree - 1.

2.5. Data Analysis

The data collected were analysed and tallied through Excel file based on the criteria by table presentation. The results were determined by the use of the Average Method. The average method refers to a measure of a middle value of the data set. The average was computed by combining the measurements related to a group of people, to a number as the average of the group.

3. RESULTS AND DISCUSSIONS

The proponents started to distribute the questionnaires in January of 2014 until February of the same year. The respondents

were given an entire week to answer the questionnaire. The respondents were composed of History Teachers and Instructors of Private, Semi-Private, and Public Schools and Institutions.

Table 2 illustrates the overall evaluation of the criteria of the effectiveness of a Student Centered Instruction in developing Higher Order Thinking Skills (HOTS) in a Philippine History Class.

The result indicates that brainstorming, metacognitive approach, group activity, and interaction are the student-centred learning designs which are often acquired by History Teachers and Instructors in class. Each criterion got an average rating of 4.5, which proved that the respondents believed these are effective styles to develop critical thinking among students. Results also show that Problem-Based Instruction, Learning Continuity, and Answering Open-Ended Questions proved to be effective styles as well, for each criterion got an average of 4.4 [10]

Project-based learning begin with 1) introduction and team planning the project, 2) initial research phase in term of gathering information, 3) creation, development, initial evaluation of presentation, and prototype artefacts, 4) second research phase, 5) final presentation development, and 6) publication of product or artefacts [11]. The learning of project-based learning that is carried out refers to the driving question which is closely related to the respiration material [11-12].

Based on the results of the evaluation, having the average of 4.5, the respondents strongly

agree that a Student- Centred Learning design can help in the development of critical thinking in classrooms so that students reach their fullest potentials.

In several studies it is observed that critical thinking is a metacognitive process. It consists of a number of skills and dispositions. When the student centred programs are used appropriately, they tend to increase the chances of producing a logical solution, valid conclusion, asking logical questions and finding interest in research [13]. These instruction methods are identified as a fundamental learning objective of education. However, every method has or the other drawbacks like, students reported for not given the opportunity to adequately learn and cultivate skills. Apart from this, not all students tend to show better performance. Few studies suggest that not every

student will be good at critical thinking, brainstorming, and research enthusiast [15]. But through these programs it can definitely help them in enhancing some learning power in them.

4. CONCLUSION

Classroom teachers or instructors should recognize the importance of having students develop higher order thinking skills. There are several designs available to assist them in teaching and assessing the skills. Gone are the days when students are provided with rote learning or things that they ought to memorize. Now, the main goal of educators is to teach the students the skills that they need to become critical thinkers and reach their fullest potentials.

In this study, it was proven that teachers and instructors find a student-centered instruction

Table 1. Rating Scale

Rate	Boundary Limit
Strongly Agree	4.5 – 5.0
Agree	3.5 – 4.4
Neither Agree nor Disagree	2.5 – 3.4
Disagree	1.5 – 2.4
Strongly Disagree	0.0 – 1.4

Table 2. Summary of Results

Criteria	Respondents				Average
	Public School Teachers	Public School Teachers	Semi-Private College Instructors	Private College Instructors	
Brainstorming	4.7	4.4	4.4	4.6	4.5
Metacognitive	4.6	4.3	4.7	4.2	4.5
PBI	4.4	4.3	4.6	4.3	4.4
Learning Continuity	4.4	4.4	4.5	4.3	4.4
Group Activity	4.4	4.4	4.5	4.4	4.5
Interaction	4.5	4.4	4.5	4.6	4.5
Answering Open-ended Questions	4.5	4.4	4.5	4.6	4.4
Average	4.5	4.4	4.6	4.5	4.5

effective because the students manifested higher-order thinking skills such as critical, logical, reflective, metacognitive, and creative thinking. These have been activated when students encountered unfamiliar problems, uncertainties, questions, and even dilemmas. Students were given an opportunity to be taught ideas that are functional and not theoretical, even in Philippine History Classes that require precision in details.

There are goals in teaching that clearly need a Student-Centred Approach. This study focused on the thought that teachers should recognize that various –levels of providing education moves from what’s to whys. Higher order thinking skills are indeed linked to the prior knowledge of subject matter content. It would be best to identify the most appropriate teaching designs and strategies in a subject which facilitate students’ growth.

Based from the results, the proponents were able to meet the objectives set beforehand which are (1) to know the common student-centered learning design used by teachers and instructors; (2) to identify which specific design is most effective as to the instructors’ preference; and (3) to identify the significance of those learning designs.

Furthermore, it can be concluded that Teachers and Instructors find it relevant to make use of a Student-Centred Learning Designs such as Brainstorming, Problem-Based Instruction, Jigsaw, Metacognitive, and the like in classroom discussions. Furthermore, it can also be concluded that lower order thinking skills

should be supported by learning-centred design to develop higher order thinking skills.

Recommendations

The proponents strongly recommend to the future researchers to come up with a wider scope of the study to be able to identify whether a student-approach instruction would be applicable and best in all subject areas. Future researchers can actually focus on Institutions that solely implement a Student-Centred Approach, to identify whether it can totally replace the Teacher-Centred Approach Learning Design.

5. ACKNOWLEDGEMENT

NA

6. CONFLICT OF INTEREST

NA

7. SOURCE/S OF FUNDING

No source of funding

8. REFERENCES

1. Schug, M. C. (2003). Teacher-centered instruction. Where did social studies go wrong, 94-110.
2. Sesen, B. A., & Tarhan, L. (2011). Active-learning versus teacher-centered instruction for learning acids and bases. *Research in Science & Technological Education*, 29(2), 205-226.
3. Kain, D. J. (2003). Teacher-centered versus student-centered: Balancing constraint and theory in the composition classroom. *Pedagogy*, 3(1), 104-108.

4. Kaput, K. (2018). Evidence for Student-Centered Learning. *Education evolving*.
5. Lightner, S., Bober, M. J., & Willi, C. (2007). Team-based activities to promote engaged learning. *College Teaching*, 55(1), 5-18.
6. Dunlap, J. C. (2005). Changes in students' use of lifelong learning skills during a problem-based learning project. *Performance Improvement Quarterly*, 18(1), 5-33.
7. Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications, and theory, with chapters*. Oxford, United Kingdom: Houghton Mifflin.
8. Calderon, J. F., & Gonzalez, E. C. (1993). *Methods of research and thesis writing*. National Book store.
9. Martinez, L. (2007). Sensory evaluation based on linguistic decision analysis. *International journal of approximate reasoning*, 44(2), 148-164.
10. Anazifa, R. D., & Djukri, D. (2017). Project-Based Learning and Problem-Based Learning: Are They Effective to Improve Student's Thinking Skills?. *Jurnal Pendidikan IPA Indonesia*, 6(2), 346-355.
11. Watts-Taffe, S., Laster, B. P., Broach, L., Marinak, B., McDonald Connor, C., & Walker-Dalhouse, D. (2012). Differentiated instruction: Making informed teacher decisions. *The Reading Teacher*, 66(4), 303-314.
12. Correa, V.I., Morsink, C.V., & Thomas, C.C. (2000). *Consultation and collaboration in special programs*. New York, NY: Prentice-Hall, Inc.
13. Dwyer, C. P., Hogan, M. J., Harney, O. M., & O'Reilly, J. (2014). Using interactive management to facilitate a student-centred conceptualisation of critical thinking: a case study. *Educational Technology Research and Development*, 62(6), 687-709.
14. Pithers, R. T., & Soden, R. (2000). Critical thinking in education: A review. *Educational research*, 42(3), 237-249.