

The Use of Constructivist Approach in the Teaching of Foundation of Special and Inclusive Education among Second Year Bachelor of Physical Education Students

Filipinas L. Bognot

Vice President for Academic Affairs and Dean, Institute of Education, Arts and Sciences, City College of Angeles, Angeles City, Philippines

This study determines the effects of the use of constructivist approach in teaching Foundation of Special and Inclusive Education in terms of class discussion, group activities, and examination. The effects of the use of the said approach are compared to the use of traditional approach which is the lecture method in terms of students' outputs in the class discussion, group activities, and pre-tests and post-tests. A type of Quasi-Experimental Design was employed since only one group of subjects was used in the entire study. Major findings show that the use of constructivist approach in teaching improved students' participation and performance in class. Mean scores of the second year Bachelor of Physical Education (BPE) students in class discussion (recitation), group activities, and post tests show high scores in terms of assessment. This is an indication that they understand the lesson and can create their own knowledge based on the concepts presented to them. The high scores of the students are indication that they perform well, thus making teaching – learning process easy. Comparing the scores obtained by the students using the constructivist approach, it shows that there is a great improvement in the academic performance of the students.

Keywords: *constructivist approach, special and inclusive education, teacher education curriculum*

Introduction

Excellent education has been identified as one of the secrets for the successful economic development of Asian nations (Barnett and Hodson, 2001). The delivery of education depends on the quality of teaching. The homing of the effective teaching qualities is carried out through effective programs that help teachers become quality teachers in the actual field of education (Ravitz, Becker, & Wong, 2000). Teachers are encouraged to employ innovative strategies in teaching to arouse their students to learn and improve their academic performance in the classroom.

Teaching students is a decision-making process for teachers decide what to teach, what approach to use, and what adaptive devices are needed (Dewey, 1916). Teachers have to plan, manage, deliver and evaluate instruction. In determining the scope and sequence of lessons to be taught, teachers need to determine short and long-range instructional objectives (Hussain, 2012).

A knowledge of scope and sequence of skills provides the teacher a clear understanding of the skills a student has mastered and those necessary to be mastered.

Effective teaching should include about 75% known and 25% unknown material, where students should be expected to demonstrate at least 80% mastery of such material before they proceed to higher levels (Anderson, Reder, & Simon, 1996). The most important activities at this stage is the learning of the students and using such information to plan subsequent instruction. Deciding what to teach is a form of diagnosis and deciding how to teach is a prescription, a treatment. The treatment should be appropriate to the student's needs to avoid educational problems.

The improvement of instruction in teaching is of great importance to both teacher and the learners (Ornstein & Hunkins, 1998). Use of innovative strategies in instruction challenges the potential of teachers to improve instructional competencies on the course. On the other hand, it will help the learners understand abstract principles, will encourage them to direct attention and eventually will lead them to further reflection. So, with the use of appropriate teaching strategy in teaching, teacher's competence will lead to students' academic achievement. Sobat (2003) postulated that the greater the variety of pedagogical approaches employed; the broader will be the range of learner's achievement. Classroom atmosphere should be such that it provokes questioning, discussions and debates and enhances students' metacognitive skills. Hence, various innovative teaching strategies were developed for the purpose of improving the teaching. One of these strategies is the use of constructivist approach.

Constructivist learning has emerged as a prominent approach to teaching during this past decade. The works of Dewey, Montessori, Piaget, Bruner, and Vygotsky, among others provide historical precedents for constructivist learning theory (Vygotsky, 1987). Constructivism represents a paradigm shift from education based on behaviorism to education based on cognitive theory (Taber, 2011). Brooks & Brooks (1993) has provided a recent summary of these theories and describe constructivist teaching practice. Behaviorist epistemology focuses on intelligence, domains of objectives, levels of knowledge, and reinforcement. Constructivist epistemology assumes that learners construct their own knowledge on the basis of interaction with their environment.

Constructivist approach asserts that students have their own way of thinking. Students should be treated as individuals and should have the opportunity to work with others and learn through observation, talking and group work (Durmus, 2016). Their utmost potentials are developed through interaction with others. Constructivism also acknowledges the importance of social and cultural influences on the intellectual development where students learn from each other.

Constructivist teaching methods emphasize communication and social skills, as well as intellectual collaboration (Gardner, 1999). Classroom activities include experimentation, research projects, films, class discussion, and social wikis (Rakes, Fields, & Cox, 2016). Though these activities, students should express their own thinking, conduct research and present their findings, provide visual context and present different sense into the learning experience, and classroom interaction. Thus, learners discover or construct essential information for themselves. Each student brings with him knowledge, opinions and experiences from his individual background that will have an influence on what he brings to the group as a whole.

Constructivists believe students should be engaged in active learning and that the teacher's role is to assist her students in what they are doing (Gardner, 1999). Students should be given the opportunity to explore a problem, try out solutions, build on this new knowledge to make adjustments and evolve new solutions. This learning application in constructivist theory means that all students have an input and are actively discussing and developing ideas (Vgotsky, 1978). Students must be encouraged to draw, discuss and write about what they are learning. They should also talk to others while actively working and not just sitting in groups.

One of the professional education courses in the teacher education curriculum is the Foundation of Special and Inclusive Education (CMO 75, Series 2017). This course deals with philosophies, theories and legal bases of special needs and inclusive education, typical and atypical development of children, learning characteristics of students with special education needs (gifted and talented, learners with difficulty seeing, learners with difficulty hearing, learners with difficulty communicating, learners with difficulty walking/moving, learners with difficulty remembering and focusing, learners with difficulty with self-care) and strategies in teaching and managing these learners in the regular class. Also, it includes the biological, sociological, and psychological theories regarding different categories of children with special needs (CCA-IEAS-OBTLP, 2020). Some of the topics included are as follows: Defining Special, Goals and Objectives of Special Education, Scope of Special Education, The Individuals with Disabilities Education Act, Planning and Providing Special Education Services, Categories of Students with Special Needs, Instructional Strategies and Modification, Parents and Families of Students with Special Needs, and Current Trends and Issues in Special Education. Over-all, the course traces the philosophical, historical, ethical, and legal bases of Special Education, discusses the biological, ethical, and psychological theories pertaining to the different categories of children with special needs, analyzes the common core of Special Education, appraises current trends and issues in Special Education; and develop positive attitudes towards students with special needs and educate them to become functional citizens of the society.

In light of the aforementioned information, the researcher determined the effects of the use of constructivist approach in the teaching of Foundation of Special and Inclusive Education among second year students enrolled in the Bachelor of Physical Education program. Its prepared teaching learning plans using constructivist approach and traditional method. Following the class discussions, the effectiveness of the constructivist approach in teaching the course is determined in terms of the following academic parameters; class discussion, group activities, and pre-tests and post-tests. Based on the results of the study, implications for the teaching of special education are formulated.

It is hoped that the use of constructivist approach in the teaching of Foundation of Special and Inclusive Education can encourage contact between students and teachers, develop reciprocity and cooperation among students, encourage active learning, give prompt feedback, and respect diverse talents and ways of learning. Also, matching the teaching approach with the thinking styles can provide proper instruction and direction leading to well-informed students toward a successful teaching and learning process. The result of the study would help transform the management of

special education teaching in the tertiary level and would serve as a baseline data for further improvement of teacher education curriculum.

Methodology

This study is classified as an Action Method of Research. In the process, the study determined the effects of the use of constructivist approach in teaching Foundation of Special and Inclusive Education among second year BPE students at City College of Angeles. Further, the effects of the use of the said approach is compared to the use of traditional approach which is the lecture method in terms of students' outputs in the class discussion, group activities, and pre-tests and post-tests. A type of Quasi-Experimental Design was employed since only one group of subjects was used in the entire study. From the results, implications for the teaching for Special Education were formulated. The study was divided into three parts: identification of the students' profile, designing of the teaching learning plans using constructivist approach and traditional method, and application of constructivist approach and traditional method.

All pre-tests and post-tests' questions were subjected for item analysis. Table of Specification was used to determine the classification of the questions following the levels of objectives in the Outcomes-based Teaching Learning Plan. After the application of each teaching approach, students were subjected to the post tests. Scores were compared and analyzed. Descriptive Statistics was used in describing the data obtained. This includes the average, ranking, weighted mean, frequency distribution and percentage. Parametric t-test was used to determine whether the means of two groups are statistically different from each other.

This study was conducted at City College of Angeles, Angeles City. This study was conducted from January 2019 to May 2019.

Results and Discussion

The effectiveness of the constructivist approach in teaching Foundation of Special and Inclusive Education was evaluated. Mean scores of the second year BPE students in class discussion, recitation (9.11 and 9.81) are high. This indicates that students understand and comprehend well during class discussion. Mean scores in the group activities are also high (9.01, 8.99, and 9.21). It means that students participated well in the group activities. Mean scores in the post tests are also high (9.01, 9.12, and 8.97). This indicates that students understand the lessons well and interact successfully during discussion. As a whole, the mean scores of the students are high which is an indication that they perform well, thus making teaching – learning process easy.

It can be inferred that scores obtained by students in class discussion (recitation) using the constructivist approach are significantly higher compared to their scores in class discussion (recitation) using traditional method of teaching (p -values < 0.05). Overall, students' ratings in their experiments were better by around 81% when their lessons are delivered via the constructivist approach. It was observed that learners took part in discussions for sharing information or their opinion about a topic or concept and learning experiences in obtaining new knowledge. Such discussions were initiated by the researcher as facilitation during class discussion to provide further

clarification of ideas and knowledge of the specific lesson. The learners participated in discussion eagerly to acquire and share information about an issue or an important concept related to special and inclusive education.

Group activities scores obtained by students in lessons taught using the constructivist approach are significantly higher compared to their group activities scores in lessons taught by employing the traditional method of teaching (p -values < 0.05). Overall, students' recitation scores were better by about 87% when instructional delivery is by means of the constructivist approach. As observed, collaborative and cooperative work activities developed contribution spirit among students in improving social skills. They became independent and capable of taking initiatives in conducting group projects. They also learnt ethics, social skills and etiquettes in groups. In the group activities, students enjoyed academic autonomy—having benefits of the self-directed learning making them independent and self-decisive in their learning choices. The students appreciated versatile and comprehensive group activities which empowered them by loosening their dependency on teachers and making them self-decisive and self-directed in learning choices. They are active stake holders in the process of knowledge construction and its dissemination. They participate in teaching learning process and assume responsibility of their learning by giving it their own meaning in their respective contexts. Constructivism offers students opportunities of cooperative and collaborative learning.

Test scores obtained by students in lessons discussed with the use of the constructivist approach are significantly higher compared to their test scores in lessons tackled by applying the traditional method of teaching (p -values < 0.05). Students' test scores were better by about 41% when instructional delivery is by means of the constructivist approach. The study found that the mean achievement of the students who participated actively in teaching learning process was greater than their counterparts who attended traditional classes. The use of constructivist approach in teaching has direct effects on students learning. As observed, high scores are obtained. In this study, scores of students who participated actively in teaching learning process was greater than their counterparts who attended traditional classes.

A study conducted by Santmire, Giraud, & Grosskopf (1999) compared learning achievement of two groups of students. The researcher found that the students who learned through constructivist approach to education and took a standardized test secured higher grades than their counterparts who were instructed traditionally in the classroom. The students' participation in such projects enhanced their academic performance as well. Therefore, active participation of students (constructivism) was affirmed to be an efficient instructional approach for creating and sustaining motivation and passion for knowledge construction.

Implications of the Results of the Study in the Teaching of Special Education

The use of constructivist approach in the teaching of Foundation of Special and Inclusive Education improves the academic performance of the students in terms of class participation, individual performance during group activities and examination. This is a proof that students could build their own understanding and discover new knowledge. Students become more active and enjoy hands-on activity. It demands teachers and students to take various roles and truly invest in

their learning. It requires reflection, interaction, investigation, more reflection and analysis. This approach to learning takes time and recognizes that not everyone is going to be on the same page or even take away the same understanding from a single lesson. This theory acknowledges the complexity of the teaching / learning cycle.

The learning environment is designed to support and challenge the learner's thinking. While it is advocated to give the learner ownership of the problem and solution process, it is not the case that any activity or any solution is adequate. The critical goal is to support the learner in becoming an effective thinker.

Conclusions and Recommendations

The use of constructivist approach in teaching improves student's participation and performance in class. Mean scores of the second year BPE students in class discussion (recitation) group activities, and post tests show high scores in terms of assessment. This is an indication that they understand the lesson and are capable of creating their own knowledge based on the concepts presented to them. The mean scores of the students are high which is an indication that they perform well, thus making teaching – learning process easy. Comparing the scores obtained by the students, it shows that there is a great improvement in the academic performance of the students.

Following the high scores of the students, it is then recommended that constructivist approach be used in the teaching of Foundation of Special and Inclusive Education. Teachers can make learning more interesting, lively, and participative. Thus, making the achievement level of students even higher. This then makes lessons more meaningful to the learners who will be guided as they learn with enthusiasm science concepts and skills in the classroom.

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