

Teaching Strategies and Program Learning Outcomes for the Bachelor of Elementary Education in a State University

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Abstract— This study would like to determine if the different teaching strategies will have a relationship with the Bachelor of Elementary Education Students Learning Outcome. The study used a descriptive survey design of research. According to Aggarwal (2008), descriptive research is devoted to gathering information about prevailing conditions or situations for description and interpretation. Data were analyzed using the IBM SPSS Statistics 2.0. It was found out that the instructors at a State University frequently used different teaching strategies effectively. BEED students are much aware of the program's learning outcomes and program performance indicators. However, it seems that instructors are using traditional teaching strategies more often it must imply for the instructors to use modern technology. Because of the findings and conclusions, the researcher recommends that a.) Although the instructors frequently used different teaching strategies effectively, instructors can use a combination of traditional and modern teaching strategies to address students' varying learning styles and academics as well as to make the learning environment dynamic and motivational for students. The teacher education program profession may explore implementing hybrid designs of learning, b.) The State University should be student-centered rather than teacher-centered, in that way it describes what the students will do, not what the instructor will teach, c.) The University should allow teachers and administrators to focus on the balance between the content across curricula. It allows them to look into each classroom and see what children learn and helps them gather data on redundancies or gaps in the course content, and d.) Training design is never considered to be done, there is always ongoing development seeking to improve student learning and content quality across schools, therefore instructors should continuously assess and may revise to ensure students get the most out of their education, and for instructors to use the most effective strategies in their lessons.

Keywords— Program learning outcome, teaching strategies, training design

I. INTRODUCTION

Teachers across the country are working hard to equip children with the skills needed for success in 21st - century world. In addition to instilling in students the flexibility to readily adapt to changing technologies,

teachers must foster learning environments that encourage critical thinking, creativity, problem-solving, communication, collaboration, global awareness, and social responsibility. Listed below the six strategies: early childhood teachers are currently using in classrooms to prepare kids for the boundless future ahead.

There are six (6) strategies Six Strategies for 21st - Century Early Childhood Teachers: 1) Integrated Technology - Integrating technology means tapping into students' interests and strengthening their technical skills, all while providing enriching learning opportunities; (2) Cooperative Learning Structures - teacher-centered instruction has had its day ^[7]. Effective teachers are increasingly using a student-centered approach. Cooperative learning sparks engagement in classrooms by encouraging interaction among the students themselves; (3) differentiated instruction - teachers can tailor learning experiences to differentiate among the individual needs of students in the classroom. There are three main learning styles: visual, auditory, and kinesthetic; (4) Goal Setting: Involving children in the goal: the setting process is an excellent way to encourage them to take ownership of their learning. In the early stages, goal setting needs to be done in a very clear and simplistic way; (5) Cross-Curriculum Teaching - In contrast to the traditional teaching of subjects in isolation, teaching multiple subjects simultaneously can help students go much deeper in learning concepts and skills. Naturally, this approach asks more from the teacher; and (6) Assessment for Learning - Assessment for Learning, or Formative Assessment- is a data-gathering process used by teachers to help them customize instruction to match students' needs. Summative assessments do not always give a clear picture of what a student knows. Applying these teaching strategies appropriately requires well-trusted means of knowledge that are needed and here the teacher's role appears ^[6].

Teachers are the most important ingredients in quality education. Although this is deeply ingrained in the policy debate, policymakers need to identify what goes into high-quality teaching to take action to improve policies, teacher training, and professional development programs for teachers to improve the achievement of all students.

This study focused on the students in Bachelor of Elementary Education of PRMSU – Castillejos Campus for the Academic Year 2020 – 2021. The study covered thirty-three (33) BEEed I and twenty-two (22) BEEed II students. To generate the needed data for the study, the researcher made use of an adapted questionnaire checklist supported with document CMO No. 74, s. 2007.

This study is an important attempt because it deals with an important issue, which is teaching strategies and program learning outcomes. It is also important because it gives useful information about the relationship between teaching strategies and program learning outcomes for the lecturers, so they can consider the study results when preparing for their teaching and learning among BEED students.

Statement of the Problem

This study aimed to determine if the different teaching strategies will have a relationship with the Bachelor of Elementary Education Students Learning Outcome.

Moreover, this study would like to answer the following questions:

1. What is the extent of use and perceived level of effectiveness of the teaching strategies as means of curriculum delivery by the instructors in a state university?
2. How may the level of awareness of BEED students on program learning outcomes (PLO) be described?
3. How may the level of awareness of BEED students on the program performance indicators be described?
4. How may the findings of this study be used to come up with the BEED Training Design?

II. MATERIALS AND METHODS

Research Design

This study used descriptive survey methods of research. ^[1] that descriptive research is devoted to the gathering of information about prevailing conditions or situations for description and interpretation. Its purpose was to collect factual information that described the

different teaching strategies of the CTE instructors of PRMSU - Castillejos Campuses. It also identified the level of Learning Outcomes of CTE Students of PRMSU – Castillejos Campus.

Respondents

This study covered the student of the Bachelor of Elementary Education of President Ramon Magsaysay State University (PRMSU) – Castillejos Campus. Table I shows the total number of respondents for the study.

TABLE I
TOTAL NUMBER OF RESPONDENTS

Course	Total Number of Respondents (f)	Percentage (%)
BEEed I	33	60%
BEEed II	22	40%
TOTAL	55	100%

Instrument

The questionnaire used for this study was adopted from the study entitles "Education Teacher's Perceptions of the Methods, Techniques, and Tools Used, and Perceived to be Effective" ^[8]. The instrument is composed of three parts.

Part I of the questionnaire is to determine the extent of use and level of effectiveness of different teaching strategies as a means of curriculum delivery by instructors.

Parts II and III of the questionnaires were lifted from CHED Memorandum Order No. 74, s. 2017 to measure the level of awareness on the Program Learning Outcomes and Program Performance Indicators.

The contents of the research instrument were validated by experts in the field of education from various higher education institutions.

The researcher presented the instrument to the research coordinator of President Ramon Magsaysay State University, Castillejos Campus, and the researcher's thesis adviser for the validation and approval of the instrument.

Data Gathering and Treatment of Data

The researcher will seek permission from the University President of President Ramon Magsaysay State University (PRMSU) through the Campus Director to conduct the study in the PRMSU – Castillejos Campus. Since permission has been granted, the floating of

questionnaires to the respondents by the program has been conducted and supervised by the program chairperson. The questionnaires have been retrieved by the researcher proceeded with data recording, coding, analysis, and interpretation of the gathered data.

Data were analyzed using the IBM SPSS Statistics 2.0. The statistical procedures that were used in the analysis and interpretation of data in this study include the following:

Frequency and Percentage. This was employed to determine the frequency counts and percentage distribution of the respondents.

Weighted/ Arithmetic Mean. This was utilized to determine the average of the extent of use and effectiveness of different teaching strategies used by instructors in the university as well as the respondents' level of awareness of Program Learning Outcome and Program Performance Indicators. The formula is as follows:

$$\bar{x} = \frac{\sum_{i=1}^n (x_i * w_i)}{\sum_{i=1}^n w_i}$$

Σ = the summation
w = the weights
x = the value

Shown below are the scale and verbal interpretation of the extent of use, the effectiveness of different teaching strategies, level of awareness on Program Learning Outcomes, and Program Performance Indicators.

TABLE II
VERBAL INTERPRETATION OF LEVEL OF USAGE OF TEACHING STRATEGIES

Level of Usage	Verbal Interpretation
4.20-5.00	Heavily Used
3.40-4.19	Frequently Used
2.60-3.39	Sometimes Used
1.80-2.59	Rarely Used
1.00-1.79	Not Used

TABLE III
VERBAL INTERPRETATION OF LEVEL OF EFFECTIVENESS OF TEACHING STRATEGIES

Level of Effectiveness	Verbal Interpretation
4.20-5.00	Very effective
3.40-4.19	Effective
2.60-3.39	Somewhat Effective
1.80-2.59	Of Little Effective
1.00-1.79	Not Effective

TABLE IV
VERBAL INTERPRETATION OF PROGRAM LEARNING OUTCOMES (PLOS) AND PERFORMANCE INDICATORS

Level of Effectiveness	Verbal Interpretation
4.20-5.00	Very Much Aware (VMA)
3.40-4.19	Much Aware (MA)
2.60-3.39	Moderately Aware (MoA)
1.80-2.59	Aware (A)
1.00-1.79	Not Aware (NA)

III. RESULTS AND DISCUSSIONS

1. The extent of use and perceived level of effectiveness of the teaching strategies

The extent of use and perceived level of teaching strategies as a means of curriculum delivery by the instructors at a State University was determined. The extent of use and perceived level of teaching strategies as a means of curriculum delivery by the instructors in a State University is shown in Table V. The teaching strategies are frequently used as revealed by the mean of 3.59. As gleaned from the table, the teaching strategies are effective (\bar{x} = 3.67).

TABLE V
THE EXTENT OF USE AND PERCEIVED LEVEL OF EFFECTIVENESS OF THE TEACHING STRATEGIES

Teaching Strategies	Extent of Use	VI	Level of Effectiveness	VI
Demonstrations	4.22	Heavily Used	4.24	Very Effective
Laboratories	2.24	Rarely Used	2.85	Somewhat Effective
Projects	3.67	Frequently Used	3.75	Effective
Lecture-Discussion	4.54	Heavily Used	4.36	Very Effective
Field Trips	1.69	Not Used	2.21	Of Little Effectiveness
Video Taped	2.89	Sometime	2.96	Somewhat

Program		s Used		effective
Problem Solving Approach	3.57	Frequently Used	3.78	Effective
Chalk Board	3.51	Frequently Used	3.59	Effective
Exams	4.74	Heavily Used	4.46	Very Effective
Discussions	4.78	Heavily Used	4.56	Very Effective
Internet	3.67	Frequently Used	3.78	Effective
Overhead Projector	4.54	Heavily Used	4.18	Effective
Slides	4.15	Frequently Used	3.96	Effective
Assignments	3.62	Frequently Used	3.81	Effective
Case Study	2.89	Sometimes Used	3.22	Somewhat effective
Role Play	3.76	Frequently Used	3.89	Effective
Lecture	4.45	Heavily Used	4.31	Very Effective
Group Study	3.80	Frequently Used	3.93	Effective
Pictures, Posters, Newsletters	3.49	Frequently Used	3.40	Effective
Computer-Assisted Instructions	2.87	Sometimes Used	3.30	Somewhat effective
Oral Presentations	4.11	Frequently Used	3.96	Effective
Individualized Instructions	4.00	Frequently Used	3.84	Effective
Exhibits	2.69	Sometimes Used	2.69	Somewhat effective
Contests	3.30	Sometimes Used	3.31	Somewhat effective
Distance Programs	2.87	Sometimes Used	3.04	Somewhat effective
Questioning	4.11	Frequently Used	4.04	Effective
Resource Person	3.91	Frequently Used	3.58	Effective
Computer Software	2.78	Sometimes Used	3.26	Somewhat effective
Using Real Object	3.65	Frequently Used	4.04	Effective
Television	2.31	Rarely Used	2.61	Somewhat effective
Brainstorming	3.80	Frequently Used	4.07	Effective
Supervised Experience	3.69	Frequently Used	3.69	Effective
Mentorship	3.48	Frequently	3.82	Effective

		y Used		
Cooperative Learning	4.24	Heavily Used	4.35	Very Effective
Overall	3.59	Frequently Used	3.67	Effective

Legend: 1.00-1.79 (Not Used); 1.80-2.59 (Rarely Used); 2.60-3.39 (Sometimes Used); 3.40-4.19 (Frequently Used); 4.20-5.00 (Heavily Used) Legend: 1.00-1.79 (Not Effective); 1.80-2.59 (Of Little Effectiveness); 2.60-3.39 (Somewhat Effective); 3.40-4.19 (Effective); 4.20-5.00 (Very Effective)

2. Level of Awareness of BEED Students on the Program Learning Outcomes (PLO)

The minimum standards for the BEED degree program are expressed in the set of learning outcomes. As gleaned from Table VI, the respondents are much aware (\bar{x} =4.05) of the Program Learning Outcomes of the Teacher Education. The respondents are very much aware that the graduates of the BEED degree program must have broad and coherent knowledge and skills for professional work, lifelong learning, and independent and /or in teams of the related field with minimal supervision. Moreover, graduates of State Universities and Colleges (SUCs) must have the competencies to support national, regional, and local development plans (RA7722).

TABLE VI
LEVEL OF AWARENESS OF BEED STUDENTS ON THE PROGRAM LEARNING OUTCOMES (PLO)

Program Learning Outcomes	Level of Awareness	Verbal Interpretation
1.Common to all programs in all types of school		
1.1. Articulate and discuss the latest developments in the specific field of practice.	3.93	Much Aware
1.2 Effectively communicate in English and Filipino, both orally and in writing	4.20	Very Much Aware
1.3 Work effectively and collaboratively with a substantial degree of independence in multi-disciplinary and multi-cultural teams	3.96	Much Aware
1.4 Act in recognition of professional, social, and ethical responsibility	4.07	Much Aware
1.5 Preserve and promote "Filipino historical and cultural heritage" (based on RA 7722)	3.91	Much Aware
Overall	4.01	Much Aware
2. Common to the discipline (Teacher Education)		
2.1 Articulate the rootedness of education in philosophical, socio-cultural, historical, psychological, and political experts	4.00	Much Aware

2.2 Demonstrate mastery of subject matter/ discipline	4.23	Very Much Aware
2.3 Facilitate learning using a wide range of teaching methodologies and delivery modes appropriate to specific learners and their environments	4.33	Very Much Aware
2.4 Develop innovative curricula, instructional plans, teaching approaches, and resources for diverse learners	4.22	Very Much Aware
2.5 Apply skills in the development and utilization of ICT to promote quality, relevant and sustainable educational practices	3.75	Much Aware
2.6 Demonstrate a variety of thinking skills in planning, monitoring, assessing, and reporting learning processes and outcomes	4.18	Much Aware
2.7 Practice professional and ethical teaching standards sensitive to the local, national, and global realities	4.11	Much Aware
2.8 Pursue lifelong learning for personal and professional growth through varied experiential and field-based opportunities	4.29	Very Much Aware
Overall	4.14	
3. Specific to the Bachelor of Elementary Education Program		
3.1 Demonstrate an in-depth understanding of the diversity of learners in various learning areas	4.05	Much Aware
3.2 Manifest meaningful and comprehensive pedagogical content knowledge (PCK) of the different subject areas	3.76	Much Aware
3.3 Utilize appropriate assessment and evaluation tools to measure learning outcomes	4.16	Much Aware
3.4 Manifest skills in communication, higher-order thinking, and use of tools and technology to accelerate learning and teaching	4.00	Much Aware
3.1 Demonstrate an in-depth understanding of the diversity of learners in various learning areas	4.05	Much Aware
3.2 Manifest meaningful and comprehensive pedagogical content knowledge (PCK) of the different subject areas	3.76	Much Aware
3.3 Utilize appropriate assessment and evaluation tools to measure learning outcomes	4.16	Much Aware
3.4 Manifest skills in communication, higher-order	4.00	Much Aware

thinking, and use of tools and technology to accelerate learning and teaching		
3.5 Demonstrate positive attributes of a model teacher, both as an individual and as a professional	4.39	Very Much Aware
3.6 Manifest a desire to continuously pursue personal and professional development	4.09	Much Aware
Overall	4.08	Much Aware
4. Common to graduates of a horizontal type of institution as defined in CMO 46, 2012		
4.1 Graduates of professional institutions demonstrate service orientation in their respective professions	3.84	Much Aware
4.2 Graduates of colleges are qualified for various types of employment and participate in development activities and public discourses, particularly in response to the needs of the communities they serve	4.02	Much Aware
4.3 Graduates of universities contribute to the generation of new knowledge by participating in various research and development projects	4.07	Much Aware
Overall	3.98	Much Aware
General Weighted Mean	4.05	Much Aware

Legend: 1.00-1.79 (Not Aware); 1.80-2.59 (Aware); 2.60-3.39 (Moderately Aware); 3.40-4.19 (Much Aware); 4.20-5.00 (Very Much Aware)

3. Level of Awareness of BEEd Students on the Program Performance Indicators

Performance indicators are focused on the specific expectations of a program. It indicates what concrete actions the student should be able to perform as a result of participation in the program. As revealed from Table VII, the awareness level of the respondents on the Program Performance Indicators is much aware (\bar{x} = 4.016). It reflects a belief that the best way for individuals and organizations to get where they're going is first to determine where they are and where they want to be--then planned backward to determine the best way to get from here to there ^[3].

TABLE VII
LEVEL OF AWARENESS OF BEED STUDENTS ON
THE PROGRAM PERFORMANCE INDICATORS

Performance Indicators	Level of Awareness	Verbal Interpretation
1. Demonstrate in-depth understanding of the diversity of learners in various learning areas		
1.1 Identify various types of learners and provide them with appropriate, culturally relevant learning activities and experiences.	4.05	Much Aware
1.2 Develop and utilize relevant materials that match the learners' learning styles, goals, and culture.	4.13	Much Aware
1.3 Select instructional strategies for the development of learners' critical and creative thinking skills.	4.29	Very Much Aware
1.4 Utilize developmentally appropriate activities in teaching different learning areas.	4.18	Much Aware
1.5 Utilize appropriate technologies to achieve learning outcomes.	4.15	Much Aware
1.6 Apply theories of learning in designing learning-teaching experiences.	4.11	Much Aware
Overall	4.15	Much Aware
2. Manifest meaningful and comprehensive pedagogical content knowledge (PCK) of the different subject areas.		
2.1 Explain subject matter content clearly, accurately, and comprehensively.	4.16	Much Aware
2.2 Relate current content with past and future lessons.	4.16	Much Aware
2.3 Integrate recent developments in education and the specific field to enrich learning.	4.04	Much Aware
2.4 Provide examples from real life to make learning meaningful.	4.38	Very Much Aware
2.5 Utilize appropriate teaching-learning methods and technology for specific subject	4.13	Much Aware

matter content.		
2.6 Keep abreast with educational issues, trends, and practices vis-a-vis local and global context to provide relevant learning experiences	3.96	Much Aware
Overall	4.14	Much Aware
3. Utilize appropriate assessment and evaluation tools to measure learning outcomes.		
3.1 Design authentic assessment, evaluation instruments, and alternative assessment tools.	4.02	Much Aware
3.2 Interpret assessment results and use these to improve learning and teaching.	4.11	Much Aware
3.3 Keep accurate and updated records of the learners' performance using technology tools where feasible and appropriate.	4.02	Much Aware
3.4 Provide timely feedback of assessment results to parents and other stakeholders.	3.85	Much Aware
Overall	4.00	Much Aware
4. Manifest skills in communication, higher-order thinking, and the use of tools and technology to accelerate learning and teaching.		
4.1 Demonstrate skills in creative and critical thinking, logical reasoning, problem-solving, and decision-making in various classroom situations.	4.22	Very Much Aware
4.2 Create learning experiences that develop the learners' higher-order thinking skills	4.27	Very Much Aware
4.3 Provide opportunities that develop the learner's communication skills	4.29	Very Much Aware
4.4 Use tools and technology to enhance learning and teaching.	4.19	Much Aware
Overall	4.24	Very Much Aware
5. Demonstrate positive attributes of a model teacher, both as an individual and as a professional.		
5.1 Act according to the norms of the teaching profession in dealing with students, parents,	4.24	Very Much Aware

colleagues, and other stakeholders.		
5.2 Manifest the positive personal and professional qualities of a teacher.	4.26	Very Much Aware
5.3 Observe integrity and professionalism in handling issues, conflicts, and controversies related to student welfare as well as parents' and community concerns.	4.09	Much Aware
Overall	4.20	Very Much Aware
6. Manifest a desire to continuously pursue personal and professional development.		
6.1 Pursue personal growth and professional development through attendance in seminar workshops, participation in demo-fests, conducting action research, and other education-related activities.	4.13	Much Aware
6.2 Participate actively in the school's community outreach activities.	4.28	Very Much Aware
Overall	4.20	Very Much Aware
General Weighted Mean	4.16	Much Aware

Legend: 1.00-1.79 (Not Aware); 1.80-2.59 (Aware); 2.60-3.39 (Moderately Aware); 3.40-4.19 (Much Aware); 4.20-5.00 (Very Much Aware)

4. Sample Training Design

The goal of training programs is to create permanent changes in people's knowledge, attitudes, or behaviors. Practicum or field experience has been viewed as an important component of teacher education because it provides an authentic learning environment for students to make sense of theoretical knowledge and practice the skills they acquire. Teaching is a demanding and complex activity that requires its practitioner to acquire, develop, and master an array of knowledge, skills, values, and attitudes. Learning to teach is not a one-shot episode, which happens once and for all. Experienced teachers know that it is rather a process of lifelong learning.

The proposed training design contains varied activities aimed at enhancing awareness of the BEED students on the Program Learning Outcomes (PLO) and Program Performance Indicators. [2] describe an outcome as

a statement of how students would recognize if or how well students have learned what is intended, they should learn. It tells what, and how well, students can do something that they were unable, or only partially able, to do before teaching. Good teachers have always had some idea of that in outcomes-based teaching and learning are simply making that as explicit as it can – always allowing for unintended but desirable outcomes. The purpose of outcomes is to make the expectations and priorities clear, with the knowledge that there will be other things students take away from courses and programs.

Pedagogical content knowledge (PCK) has particular relevance for understanding the factors that contribute to high-quality teaching behaviors. PCK is defined as one's knowledge of how to teach specific contexts [5] [4] identified four unique subcomponents. The first dimension of PCK relates to the teacher's knowledge about the purpose of teaching, which is reflected in a teacher's goals [4]. Second, PCK incorporates the teacher's knowledge of the students' understanding of what of the subject matter. In particular, teachers should be aware of what a student already knows, as well as having knowledge of the subject matter that is likely to be challenging and need development. The third element of PCK refers to the teacher's knowledge of instructional strategies for teaching specific topics, and the final part of Grossman's content/materials, as well as knowledge of the specific content required for a given cohort.

IV. CONCLUSION

From the aforementioned findings, the following conclusions are derived in this study. First, the instructors at a State University frequently used different teaching strategies effectively. However, it seems that instructors are using traditional teaching strategies more often it must imply for the instructors to use modern technology. Second, BEED students are much aware of the program's learning outcomes. This shows that they have broad and coherent knowledge, skills, and attitudes that BEED students should acquire at the end of the program. Third, BEED students are much aware of the program performance indicator. This manifests that the BEED students are knowledgeable about the elements of their career plan and what they want to achieve by a certain period. This can be used to manage and track the progress of their career plan. Fourth, the proposed training design for the BEED program may be used to serve as a guide to review and for modification to identify and address academic gaps, redundancies, and misalignments for purposes of improving the overall coherence of a course of study and by extension and its effectiveness.

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