

Assessing Pre-Service Teacher Education and Graduate Employability

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Asia Pacific Journal of
Education, Arts and Sciences
Vol. 7 No.4, 39-50
October 2020
P-ISSN 2362-8022
E-ISSN 2362-8030
www.apjeas.apjmr.com
ASEAN Citation Index

Date Received: July 9, 2020; Date Revised: August 25, 2020

Abstract –*The pre-service education in teacher training institutions is vital in determining the graduate's readiness to proceed to the teaching profession. One important indicator of graduates' preparedness is their employment in jobs related to their college degrees. This paper assessed the pre-service education curriculum of a state college in Bicol region based on the educational experiences and employment status of graduates. Specifically, this study looked into the curriculum in terms of teachers' performance and relevance of subjects; effectiveness of student services; adequacy of facilities and materials; and the employment-related experiences of graduates. The difference per batch in the assessment of the curriculum was also determined. The descriptive-survey method was used to trace 127 graduates from 2009-2012. The curriculum was effective on the development of personal and professional competencies, values formation and meeting educational standards. Teachers' performance was rated good and courses were found very relevant to their work as teachers. Student services were considered effective while laboratories, equipment and instructional materials were found adequate. Readiness for the job contributed to immediate employment while lack of job opportunities caused the delay. There were significant differences in perceptions among batches on the performance of teachers in Languages, Humanities and Social Sciences and the adequacy of materials in science laboratories. The curriculum could be enhanced with the improvement of student services, in-house review for licensure examination, assignment of qualified teachers to handle professional education and content courses and development of entrepreneurial skills of students.*

Keywords– *Academic performance, Curriculum, Employment status*

INTRODUCTION

Educational institutions play a crucial role in providing students the necessary knowledge, skills,

abilities, attitudes and experiences related to their chosen fields. Quality education and training enable graduates to compete with the best in the world. An educational program provides the policies and standards that schools follow to ensure that students enrolled in the same program, anywhere in the country will be given the same quality of education. Consequently, all graduates of the program have equal chances of being employed in their areas of specialization.

Pre-service Teacher education programs are the basic formal disciplines that individuals enrol in before they can enter the teaching profession. These programs usually comprise of a combination of theoretical knowledge about teaching and a field-based practice experience called the Practicum or Practice Teaching [1]. The quality and capacity of the country's basic education system relies, to a great extent, on the ability of the Higher Education Institutions (HEIs) to train a sufficient number of promising teachers to be hired annually through a quality pre-service teacher education program. The future teachers' past experiences as students in classrooms have a significant effect on their attitudes and behaviours as teachers in their own classrooms [2]. Moreover, it can be deduced that a poor pre-service teacher training can adversely be cascaded to their future students [3].

Different countries have different programs for pre-service education. Some factors that need to be considered in pre-service training are the structure, coursework and field experiences of future teachers. Initially, teacher education programs should be aligned to the school's vision. It should also be in compliance with professional standards such as: curriculum development and implementation, pedagogy, teaching methodologies, measurement and assessment processes and sufficient infrastructure, facilities and other resources to effectively implement the program as indicated in a state policy [1],[4].

The core of an educational program is its curriculum in view of the fact it is the "planned

interaction of students with the instructional content, materials, resources, and processes for evaluating the attainment of the educational objectives [5]. Thus curriculum evaluation of the pre-service teacher education program is important since it examines the effect of implemented curriculum on student (learning) achievement so that if necessary, the curriculum can be revised and to review teaching and learning processes in the classroom [6]. It details on the: Identified strengths and weaknesses of a curriculum and its implementation; Essential information for strategic changes and policy decisions, Inputs needed for improved learning and teaching and Indicators for monitoring, including the faculty, resources, infrastructures and services.

One of the indicators of a quality pre-service teacher program is the employability of its graduates. Employability is not only about gaining a job; it also implies the capacity of graduates to perform jobs that are related to their areas of specialization. Assessment of the program should include employability as it measures the outcomes of the program instead of just the outputs. These are done through tracer studies.

Tracer studies are surveys mostly used by HEI's to follow up on their graduates; find out what they are doing in so far as the education and training they have received from their alma mater [7]. It involves identification of the graduates' transition to the job market [8]. The subjects of a tracer study can be multiple, but common topics include questions on study advancement, the transition to work, work entrance, job employment, use of learned competencies, current work and attachment to the education institution [9].

Data from tracer studies are valuable feedback from graduates and inputs for the improvement of the program. They provide a sound basis for intentional improvement of both content (curricula and related activities) and delivery of their educational services [10],[11]. They can provide valuable data for evaluating the results of the education and training of a specific institution that may be used for further development of the institution in the context of quality assurance [12]. Various tracer studies have been done in the country, which looked into the graduates' observations of their experiences in their alma mater as well as their experiences as they looked for employment after graduation [11], [13]-[16].

The findings of such studies can be used to define or redefine the mission of HEIs and to determine

where most of its graduates find employment. Data generated from tracer studies may be used to evaluate and review the curricular programs of an educational institution. If universities are to improve their teaching and training of graduates the precedence should be to learn and garner improvements from graduates' nuanced experiences [8].

Among educational institutions in the Philippines, the Teacher Education remains popular in the country, as evidenced by the number of schools offering the program. Lately, the demands for elementary and secondary teachers have been rising due to development and innovations in the Philippine educational system. The mandatory kindergarten and preparatory education increased the demand for elementary and early childhood teachers. The new K-12 curriculum demanded additional teachers to teach in the senior high school, as well as new competencies that teachers should learn. [17] Studies in pre-service teacher education programs reported the importance of qualified faculty, preferably with a doctoral degree for better performance in the licensure examinations [3].

Particularly, the Bachelor in Elementary Education (BEEd) program is an undergraduate teacher education program designed to prepare individuals intending to teach in the elementary level. [19]. At the Bicol State College of Applied Sciences and Technology (BISCAST), BEEd is one of its pioneer programs which started in 1988 through DECS Order 39. Previous assessment of the curriculum were conducted through tracer studies conducted among the BEEd graduates for the period 1993-1997 [20] followed by another one, for the period 1998-2004 [21].

The results of this study are valuable inputs for the review and revision of the program. Markedly, it provides concrete basis for proposing infrastructures, facilities and other resources for its improvement. For teacher education institutions, this may result in policies not only for proper management of the program but on the support for its graduates for employment, such as linkages with the DepEd and other schools.

OBJECTIVES OF THE STUDY

This study was conducted with the goal of assessing the pre-service teacher education program, specifically the BEED program and determine employability of graduates from 2009-2012. Specifically, this study focused on: observed

effectiveness of the BEED program; observations of graduates on the curriculum in terms of: Performance of subject teachers, Relevance of subjects to present employment, Effectiveness of the student services; and Adequacy of the physical facilities/materials; Employment-related experiences of the graduates in terms of waiting time, immediate employment; and delay in employment; investigating difference per batch in terms of perceived effectiveness of the BEED program and perceived relevance of the subject areas to their present employment.

METHODS

This study employed the descriptive-survey method to assess the BEED program. Graduates of the program from 2009 to 2012 were involved as respondents. For the survey, the Tracer Study instrument from the Commission on Higher Education (CHED) was adopted with some modifications. A five-point Likert-type scale was used to measure effectiveness, encoded as follows: Very Effective (5), Effective (4), Moderately Effective (3), Slightly Effective (2), Ineffective (1).

The survey instrument consisted of items on: Effectiveness of the BEED Program, Perception of the Graduates on Various Aspects of the Curriculum (general performance of teachers in different subject areas, relevance of subjects to the present work of graduates, effectiveness of student services, adequacy of physical facilities and materials), Employment Profile (Nature of Employment of Graduates, Status of Employment of Graduates, Length of Service of Graduates, Other Sources of Income of Graduates, Employment-related Experiences of the BEED Graduate (employment-related experiences of the BEED graduates, time for graduates to find employment).

The snowball technique was one procedure used for data gathering. Snowball sampling, also known as chain referral sampling, is a non-probability process of survey sample selection that is commonly used to locate rare or difficult to find populations, like graduates of universities [23]. In this study, this sampling method started with the identification of a sample of BEED graduates who graduated from 2009 to 2012 who can easily be located. The next step was the solicitation of referrals from other graduates who are known to the first batch of respondents. In many applications, this referral process continues (or snowballs) until an acceptable number of eligible respondents have been located. In this method,

graduates who were traced first helped in tracing other graduates. The researchers were also able to distribute questionnaires in schools and other places where the graduates are currently working. Seminars and convocations were also opportunities where some graduates were found. A number of them were also reached through social media, electronic mail and telephone interviews.

The statistical tools used were frequency count, percentage and weighted mean. Analysis of Variance (ANOVA) was used to determine significant differences in the perception of graduates per batch on the effectiveness, adequacy and relevance of the different aspects of the BEED program.

RESULTS AND DISCUSSION

From 2009 to 2012, there were 166 graduates in the BEED program. Table 1 shows the percentage of respondents who were included in the study.

Table 1. Percentage of Respondents (to population)

Year	Number of Graduates	Sample	Percentage (%)
2009	25	21	84.00
2010	45	33	73.33
2011	47	36	76.59
2012	49	37	75.51
TOTAL	166	127	76.51

Table 2 presents the profile of the respondents along gender, civil status, age, eligibility and educational qualification. Data show that 82.7% of the graduates were female, 85.8 percent were single, and were generally between ages 22-24. Results also show that 77.2% are Licensure Examination for Teachers (LET) passers but most are bachelor degree holders (87.45%) with only 12.6% undergoing graduate studies. Similar data in two other studies [11], [15] showed that 77% and 87% respectively of the teacher education graduates were female. This affirms that the teacher education program is more attractive to females than males and that teaching is a female dominated profession. These findings imply that although the BEED graduates possess the required license to teach, yet they have to undergo professional development to improve their teaching competencies and qualifications. As to the LET passing rate, another study revealed a result contrary to the one yielded by this study. It showed that teacher education institutions in the Philippines have low passing rates in the LET that it could not even supply the demand for basic education teachers. [17] The study also noted

that there are places that have low passing rates in the licensure examination which results in the poor performance of the higher education institutions. One contributory factor in the low passing rate is the number of LET re-takers who oftentimes do not pass the examination.

Table 2. Profile of Graduates (n=127)

	F	%
Gender		
Male	22	17.3%
Female	105	82.7%
Civil Status		
Single	109	85.8%
Married	18	14.2%
TOTAL	127	100%
Age		
20	1	.8%
21	9	7.1%
22	31	24.4%
23	32	25.2%
24	25	19.7%
25	10	7.9%
26	13	10.2%
28	1	.8%
29	2	1.6%
30	2	1.6%
32	1	.8%
Eligibility		
Licensure Examination for Teachers (LET)	98	77.2 %
Civil Service Professional Examination	3	2.4 %
No eligibility	26	20.5 %
Educational Qualification		
College/Bachelor's Degree	111	87.4 %
MA units	16	12.6 %

Effectiveness of the BEEd Program

Effectiveness was assessed along seven (7) identified dimensions: consistency with the vision and mission of the institution, consistency with educational/training needs, taking into account new trends in education, meeting educational standards, development of personal and professional competencies, formation of values and development of entrepreneurial skills

Table 3 shows that graduates considered the BEEd program *effective* with an average weighted mean of 4.24, with ratings from 4.13 to 4.37. Respondents rated “developing their personal and professional competencies”, the highest and “development of entrepreneurial skills” the lowest

(4.13) among the 7 dimensions although all 7 seven indicators are considered *effective* by the graduates.

Table 3. Effectiveness of the BEEd Program

Indicators	Mean	VI
Consistency with the Vision & Mission of the institution	4.22	Effective
Consistency with educational/training needs	4.20	Effective
Taking into account new trends in education	4.24	Effective
Meeting educational standards	4.25	Effective
Development of personal and professional competencies	4.37	Effective
Formation of values	4.27	Effective
Development of entrepreneurial skills	4.13	Effective
Average Weighted Mean	4.24	Effective

These findings could be attributed to the curriculum of the BEED where there is a sufficient number of courses that develop their professional and personal competencies such as the professional and content courses. In these subjects, pre-service teachers are given opportunities to hone their teaching skills, leadership skills and creativity in various class activities provided by subject teachers. However, there is no subject in the curriculum where students could develop entrepreneurship, an important skill that that graduates could benefit from if they would not be able to find a teaching-related employment.

In other studies, competencies developed in college were also determined among hotel and restaurant management graduates of one university and revealed that entrepreneurial skills was the most developed skill followed by human relations and communication skills [24]. However, in another study [25] the entrepreneurial skills are the least developed competencies of graduates. A study that looked into a program revealed that curriculum and instruction, class size and faculty's pedagogical skills were considered by graduates as strengths of the program [26].

Observations on Various Aspects of the Curriculum

The BEED curriculum was further categorized into four aspects: general performance of teachers in different subject areas, relevance of subjects to the present work of graduates, effectiveness of student services and adequacy of physical facilities and materials. Specific indicators were identified for each aspect and were rated by the respondents.

Table 4. General Performance of Teachers in Different Subject Areas

Subject Areas	Mean	VI
I. Professional Education	4.50	Good
II . General Education Mathematics & Sciences	4.43	Good
Languages	4.46	Good
Humanities & Soc. Sciences	4.45	Good
III.- Content Courses	4.50	Good
Average	4.47	Good

The respondents evaluated the general performance of teachers along mastery of the subject matter, use of methods and strategies, motivation techniques, attendance and punctuality. Teachers in general education, professional education and specialization/major courses were all considered *good* by the graduates. However, the general performance of Professional Education teachers and teachers of Content Subjects were rated high by the graduates, both with 4.5 weighted mean. Science and Mathematics teachers were rated lowest with a weighted mean of 4.43. In most cases, Mathematics and Science are considered as difficult subjects and are avoided by students. This negative attitude towards the subjects usually results to bias for teachers, hence it could be the possible reason for the lowest rating. On the other hand, the high rating for teachers in Professional Education and Content courses could be due to the perceived usefulness of the subjects for students. These are subjects that are directly related to teaching content and pedagogy in subjects in the elementary level where graduates are teaching. The results imply that the evaluation of the performance of college teachers was associated by graduates to the relevance of the courses to their actual work as teachers and their general attitude towards the subjects.

The teaching effectiveness of teacher education faculty was also studied in another state university, the result of which is a very satisfactory level along four (4) parameters such as commitment, knowledge of the subject, teaching for independent learning, and management of learning. The said study used the Faculty Evaluation Instrument for NBC 461 evaluation in state college and universities.

Graduates also rated the different subjects taken in their undergraduate program as to their relevance in their present employment. Table 5 shows that most of the subjects were rated as very relevant with the Professional Education subjects were rated most relevant all the subjects ($M=4.72$), While the Computer subject got the lowest rating ($M=4.26$).

Table 5. Relevance of Subjects to the Present Work of Graduates

Subject	M	VI
Sciences	4.59	Very Relevant
Math	4.66	Very Relevant
English	4.63	Very Relevant
Filipino	4.59	Very Relevant
Social Sciences	4.5	Relevant
Humanities	4.52	Very Relevant
Drawing	4.47	Relevant
P.E.	4.5	Relevant
Computer	4.26	Relevant
Professional Educ.	4.69	Very Relevant
Field Study	4.62	Very Relevant
Practicum	4.72	Very Relevant
Average	4.56	Very Relevant

It could be gleaned from the results that the subjects found very relevant were those that have direct bearing on the graduates' work as teachers. For instance, the Field Study and Practicum provided the graduates with experiences in actual school and classroom situations. Such experiences could be used as valuable references for planning and decision making now that they are in the actual field of teaching. The Professional Education subjects were also considered very relevant since it provided the graduates with knowledge about pedagogy, assessment and use of technology in teaching. These are essential competencies required in one's work as a teacher. The BEED graduates involved in this study are generalists since they did not specialize in any field. This means that they should be able to teach any subject in the elementary. That could be the reason why English, Filipino, Math and Sciences were found to be very relevant to their present work as teachers.

Table 6. Effectiveness of Student Services

Student Services	M	VI
Guidance & Counselling	3.91	Effective
Medical Services	3.69	Effective
Dental Services	3.58	Effective
Safety & Security	3.96	Effective
Admission & Enrolment	3.5	Moderately Effective
Scheduling of classes	3.68	Effective
Library Services	4.13	Effective
Accounting & Cashiering	3.56	Effective
Maintenance of Facilities	3.86	Effective
Average	3.76	Effective

A significant part of the implementation of the curriculum is the provision of support services to

students. The graduates observed that the Student Services provided by the school as relevant. Among the services, the library was rated highest at 4.13 while Admission and Enrolment was lowest at 3.5. The library service got the highest among the student services since it was the most availed by the graduates. Other services such as scheduling of classes, admission and enrolment and cashiering services got low ratings because they are all related to the enrolment process which many students complain of when there was still no online enrolment.

Another tracer study of graduates [11] also show high satisfaction for library services, security services and guidance and counselling services just like this study. Similarly, a study on the influence of student services to student development in the four campuses of a state university also showed the library as the top and selection, admission and enrolment as the last when it comes to effectiveness of service [28].

Table 7. Adequacy of Physical Facilities and Materials

Physical facilities / materials	M	VI
Space in classrooms	4.10	Adequate
Space in shops	3.78	Adequate
Space in Laboratories	3.66	Adequate
Tools, equipment, fixtures in classrooms	4.04	Adequate
Tools, equipment, fixtures in shops	3.72	Adequate
Tools, equipment, fixtures in laboratories	3.69	Adequate
Supplies & materials for shop work	3.68	Adequate
Supplies & materials for science & lab. work	3.65	Adequate
Library/reference materials for Professional subjects	4.32	Adequate
Library/reference materials for Gen. Educ. subjects	4.36	Adequate
Library/reference materials for Major / Specialization subjects	4.09	Adequate
Instructional Materials	4.06	Adequate
Audio-visual equipment & Facilities	4.0	Adequate
Athletics, assembly & sports facilities	4.04	Adequate
Average	3.92	Adequate

Table 7 shows the perceived adequacy of physical facilities and relevant materials for instruction. Generally, the physical facilities and materials were considered *adequate* with the library and reference materials for general education subjects getting the highest rating of 4.36; Rated lowest was supplies and materials for science and laboratory work (3.65). The high rating of library resources validate the high rating for library services in the previous table. This result

reveals much of the school's priorities to improve its learning facilities. It also shows an efficient planning process of the College of Education, particularly for needed books, to comply with the programs' requirements on facilities and resources. But as a government agency, the required procurement process is sometimes a challenge. Thus, the immediate purchase of materials and resources, including books is delayed.

A similar result to this study could be found in a study on the adequacy of school facilities [29] which showed that classrooms or academic learning spaces were observed to be most adequate of the facilities. The weakness of laboratory resources was revealed in the present study and that of previous ones [26].

Table 8. Nature of Employment of Graduates

Nature of Employment	F	%
Teaching	114	89.8
Non-teaching	11	8.7
Key Position	2	1.6
TOTAL	127	100

The employment rate or employability of graduates is an important outcome indicator of all universities and colleges. All schools aspire for high employability of its graduates to affirm its mission of producing productive citizens of the country. Of the 127 respondents, 89.8% are employed as teachers which means that they have jobs related to their academic preparation. Two (1.6%) of the BEEed respondents are occupying key positions such as supervisory or managerial work. These findings are parallel with the previous studies [15], [30]. Both studies show that more than 80% of graduates are employed as teachers. This implies that BEED graduates possess competencies that are aligned with those required for elementary teachers.

Table 9. Status of Employment of Graduates

Employment Status	freq	%
Permanent	60	47.2
Temporary	4	3.1
Contractual	29	22.8
Substitute	8	6.3
Locally Funded	18	14.2
Volunteer	7	5.5
TOTAL	127	100

On the status of employment of graduates, Table 9 shows that almost half (47.2%) of them are occupying permanent /or temporary positions, while the others are either contractual, substitute or volunteer teachers.

Though the respondents are generally young and new in their employment, more than half have established security in their jobs. This is contrary to the findings of another study [30] that more than 50% of the graduates hold contractual positions and only 24.14% are permanent. This implies that the graduates involved in this study possess the minimum qualifications required or even more for a permanent position.

Table 10. Length of Service of Graduates

Length of Service	freq	%
Less than 1 year	31	24.4
1 year	32	25.2
2 years	40	31.5
3 years	17	13.4
4 years	7	5.5
TOTAL	127	100

The length of service of the graduates at the time of the study was 2 years (31.5%), 1 year (25.2%) and less than a year (24.4%). Only 13.4% have 3 years and 5.5% have 4 years in the service.

Table 11. Other Sources of Income of Graduates

Other Sources of Income	freq	%
Part time work outside of main employment	5	5.5
Agriculture	2	1.6
Business	4	3.1
Other sources(insurance underwriting, tutorial)	4	3.1
No other Source	110	86.6
TOTAL	127	100

Majority of the graduates (86.6%) have no other source of income aside from their main employment (teaching) while others are engaged in part time work (5.5%); business, insurance underwriting and tutorial (3.1%); and agriculture (1.6%). Since most of the graduates are employed as teachers, they do not have much time to engage in other income-generating activities due to the demanding nature of teaching in the elementary. Also, majority of the graduates are new in the teaching profession, they are still in the process of adjustment. Hence, they do not have much time for other activities outside of work.

Finding employment after graduation is a constant challenge for graduating students. Table 12 shows that most of the respondents were employed within a year or less (92.1%) from the time they graduated from college. The national employment rate of the

Philippines is 94.6% in 2019 and 57.8% of which are in the services sector, like teaching [31].

Table 12. Time for Graduates to Find Employment

Time	f	%
Less than a year	76	59.8
Within a year	41	32.3
After 2 years	7	5.5
After 3 years	2	1.6
Others	1	.8
TOTAL	127	100

Results of this research indicate that the BEEd graduates meet the qualification standards set by the Department of Education and other agencies. Immediate employment also implies a high demand for teachers. Findings from another study show that graduates found employment within 6 months from graduation. This confirms the employability of teacher education graduates [14].

Table 13. Reasons for the Immediate Employment of Graduates

Reasons	f	%
Through the assistance of the school's placement office	3	2.4
Through media advertisement	1	.8
Through the recommendation of relatives/friends	33	26
Through the recommendation of a former teacher	9	7.1
Through the personnel office of the hiring company	5	3.9
I was emotionally ready for the job	36	28.3
I was equipped with the necessary knowledge for the job	58	45.7

There are several reasons for the ease of employment among the graduates. Table 13 presents the graduates' personal explanations for this. Notably, the most number of response was that they have the necessary knowledge for the job (45.7%); because of emotional readiness (28.3%); and because of the recommendation of relatives or friends (26%). These findings reflect the responsiveness of the curriculum to the standards of employers considering that more than half of the employed graduates were hired for possessing the necessary job competencies. It could also be inferred from the data that the college, through the placement office, did not contribute much to the employment of graduates. A tracer study on Engineering graduates in one higher education institution in the Philippines [32] cited different

reasons for finding employment by the graduates such as direct hiring as a walk-in applicant, recommendation from somebody and as a response to advertisement.

Table 14. Reasons for the Delay in Employment of Graduates

Reasons	f	%
Salary offer is too low	6	4.7
Work condition is not satisfactory	1	.8
Little or no opportunity for advancement	2	1.6
No job opportunities	7	5.5
No information available on vacancies	5	3.9
Not emotionally ready for the job	3	2.4
Did not qualify because I failed in the employment exam	1	.8
Other reasons:		
No job within vicinity of residence	4	3.1
Lack of work experience	2	1.6

Though the graduates have a high employment rate, some were not able to get work as easily. Table 14 identifies that the more popular reasons for the delay was the lack of job opportunities or job vacancies (9.4%); and that salary offer is too low (4.7%) . It could be surmised that graduates who experienced these are residing in places where access to information is difficult or the graduate lacks the initiative to seek information. Similar results in another study show that lack of job opportunities or vacancies was the main reason why graduates found difficulty in looking for employment [13]. Contrary to this are the findings in studies that family concerns [32] and advance or further study [32], [26] were the main reasons for the delay in employment of graduates.

Table 15. ANOVA table of differences among batches in terms observed effectiveness of the program

Indicators	F	Sig.
Consistency with the Vision & Mission of the institution	.62	.606
Consistency with educational/training needs	.65	.584
Taking into account new trends in education	.32	.809
Meeting educational standards	1.41	.244
Development of personal and professional competencies	2.48	.064
Formation of values	1.93	.129
Development of entrepreneurial skills	2.08	.106

On the effectiveness of the BEEd program, the computed f values were all less than critical values at

df= 126 and .05 significance level (Table 15). This means that *there is no significant difference in the perception of the graduates per batch* on the effectiveness of the program's consistency with all the indicators: Vision and Mission of the institution; consistency with the education and training needs of the graduates; taking into account new trends in education; meeting educational standards; development of personal and professional competencies; formation of values and development of entrepreneurial skills.

This means that across all batches, the graduates observed that the program was effective (Table 3). The result further shows that the implementation of the program was consistent in all its years of operation. It speaks well of how the program was constantly improved by the administration so that its students will benefit most from it.

On the performance of the various subject teachers, results presented in Table 16 show that *there is a significant difference in the perception of the graduates per batch* on the performance of the Language and Humanities and Social Science instructors which covers their mastery of the subject matter, use of methods and strategies, motivation techniques, attendance and punctuality. The computed values in other subject areas such as Professional Education, Mathematics and Sciences, and major/specialization courses are not significant at .05, hence, there is no significant difference in the perception of the graduates per batch on the performance of their teachers in the said subject areas.

Informal interviews among graduates and class programs revealed that General education courses teachers are commonly taught by part time teachers, due to the lack of permanent and regular teachers in the College. Thus, the difference in the observations of graduates is due to the different teachers handling the subjects. Unlike professional and content courses that are handled by Education program graduates, themselves.

Table 16. ANOVA table of differences among batches in terms of performance of instructors

Subject Areas	F	Sig.
Professions Courses	1.02	.386
Gen. Ed.: Mathematics and Sciences	1.81	.148
Gen. Ed.: Languages	2.72	.048
Gen. Ed.: Humanities & Soc. Sciences	2.81	.042
Content Courses	2.46	.066

On the relevance of the different subjects in the curriculum, the significance level of computed F

values are more than .05. Therefore, *there is no significant difference in the perception of graduates per batch on the relevance of all different subject areas* such Sciences, Mathematics, English, Filipino, Social Sciences, Humanities, Drawing, Physical Education, Computer Education, Professional Education, Field Study and Practice Teaching.

Table 17. ANOVA Table of Difference among Batches in terms of Courses in College

Subject	f	Sig.
1. Sciences	.99	.398
2. Mathematics	1.24	.299
3. English	1.13	.341
4. Filipino	.97	.407
5. Social Sciences	.23	.879
6. Humanities	.47	.707
7. Drawing	1.16	.330
8. Physical Education(PE)	.58	.630
9. Computer	1.22	.307
10. Professional Education	1.80	.150
11. Field Study	1.34	.266
12. Practicum	.23	.879

This is an important result since it conveys the responsiveness of the course offerings to the future teacher. Across all the batches, the graduates affirm the importance of all subject areas in their current work. Since the BEED graduates are generalists, they are required to handle all subject areas in the elementary level. The Basic Education Curriculum (BEC) of the Department of Education still includes all these areas and even if revisions are made, the BEED graduate readily adapts.

Table 18 presents the results on the difference of observed effectiveness of various student services. It shows that the significance level of computed F values are more than .05. Hence, *there is no significant difference in the perception of the graduates per batch or year on the effectiveness of the student services* such as guidance and counselling services; medical services; dental services; safety and security services; admission and enrolment services; library services; accounting and cashiering services; maintenance and beautification of facilities and surroundings.

Referring back to Table 6, the graduates observed that these student services were effective and it is consistent across batches, with only Admission and Enrolment observed to be moderately effective. Comparing the computed F values, it is also observed that Admission and Enrolment has the lowest F value or the lowest difference across the batch of graduates. This is an area in the student services that can be

revisited for improvement. Some suggestions from graduates were to computerize the enrolment system of the College.

Table 18. ANOVA Table of Difference among Batches in terms of Student Services

Student Services	F	Sig.
1. Guidance & Counselling	2.09	.104
2. Medical Services	1.12	.345
3. Dental Services	.40	.752
4. Safety & Security	1.00	.396
5. Admission & Enrolment	.07	.976
6. Scheduling of classes	1.16	.330
7. Library Services	1.02	.385
8. Accounting & Cashiering	.43	.734
9. Maintenance of Facilities	2.09	.104

Results show that *there is a significant difference only in the perception of the graduates per batch on the adequacy of supplies and materials during Science laboratory work* since the computed f value 3.17 is significant at .027 and is therefore lower than .05. However, *there is no significant difference in the perception of graduates from different batches on the adequacy of other physical facilities and materials* such as classrooms, tools, equipment, apparatuses, fixtures, library/reference materials, instructional aids, audio-visual equipment and facilities and athletics, assembly and sports facilities. From Table 7, graduates observed that facilities and materials are adequately provided by the school and is doing so consistently over the years. And this is being done by constant upgrading of facilities and books in the library as reflected in the strategic and budget planning of the school.

Table 19. ANOVA of Difference among Batches in terms of Physical facilities / materials

Physical facilities / materials	F	Sig.
1. Space in classrooms	.90	.449
2. Space in shops	1.62	.187
3. Space in Laboratories	1.03	.381
4. Facilities in classrooms	.93	.431
5. Facilities in shops	3.16	.027
6. Facilities in laboratories	2.02	.115
7. Supplies for shop work	1.54	.209
8. Supplies for science & lab. work	.54	.657
9. Library resources for Professional subjects	.60	.623
10. Library resources for Gen. Educ. subjects	.368	.776
11. Library resources for Major / Specialization subjects	.944	.421

Table 19 (cont.) ANOVA of Difference among Batches in terms of Physical facilities / materials

Physical facilities / materials	F	Sig.
12. Instructional Materials	.109	.955
13. Audio-visual equipment & Facilities	1.61	.190
14. Athletics, assembly & sports facilities	2.09	.104

Furthermore, Table 20 shows that Batch 2009 scored the construct higher than the other batches. This brings to light that the graduates have observed a slight deterioration of shop facilities. But on a positive note, for batch 2012, the observations have no difference with that of batch 2009. This means that though the adequacy of facilities were observed to have gone lower with batches 2010 and 2011, it has been improved for the latest batch. This shows that the College is doing its best to meet the needs of its students in compliance with the standards of the programs.

Table 20. Tukey’s test for post hoc analysis for Facilities in shops

Batch	N	Subset for alpha=0.05	
		1	2
2010	33	3.60	
2011	36	3.61	
2012	37	3.73	3.73
2009	21		4.10

CONCLUSIONS AND RECOMMENDATIONS

Overall, the graduates considered the BEED program as effective. Among the seven identified dimensions, the development of personal and professional competencies, formation of values, and meeting educational standards were particularly rated higher than the others. The performance of their teachers in college was also rated good with almost equal ratings for General and Professional subject teachers. Their subjects in college were also perceived very relevant to their present work as teachers. Student services were likewise assessed as effective while facilities, including laboratories, equipment and instructional materials were considered to be adequate.

The graduates are mostly female, single, between the ages of 22-24, LET passers with only few with MA units. They are employable with 89.8% working as teachers and 47.2% holding permanent positions. This implies that they possess the necessary competencies needed for employment. The graduates have no other source of income aside from teaching. Although graduates are employable as teachers, they

believe that they did not develop entrepreneurial skills.

It did not take much time for the graduates to find employment since they were hired in less than a year or within a year. This implies that the curriculum is effective in developing employable skills of students. On the other hand, delay in employment was attributed to lack of information on job opportunities or no job opportunities at all. Only 7 respondents experienced delay in employment. It may be concluded that they are those who are not highly driven or not very competitive.

Generally, there is no significant difference in observations across batches on the relevance, effectiveness and adequacy of the various aspects of the BEED program such as faculty performance, subject areas, student services and physical facilities and instructional materials. Only 3 areas were found to have significant differences across batches- performance of teachers in Languages, Humanities and Social Sciences and the adequacy of facilities in Shops.

Program assessments such as this are conducted to improve delivery of instruction to the students as well as maintaining the standards set by CHED. Based on the findings reported, several recommendations are given: There is a need for the College to improve on the student services specifically on admission and enrolment, scheduling of classes and the medical and dental services. The computerized enrolment and class scheduling should be evaluated and maximized to give more efficient and accurate services to the students. For the physical facilities, laboratories and shops may be assessed for renovation and upgrading to keep up with the needs of the times.

To improve the performance of graduates in board examinations, an in-house review program for graduates should be provided with competitive rates, with a roster of competent and qualified reviewers and review materials that have passed the evaluation of a review committee. Curriculum may be expanded to include opportunities for graduates to enrol in the graduate program of the College, in this case the Master of Arts in Teaching, and complete it in a shorter period of time. The curriculum may be enhanced to develop the entrepreneurial skills of students to give them competencies to be productive, self-employed and self-sufficient. Teachers should continually conduct self-evaluation of their teaching effectiveness and outcomes and use the results to engage in professional development activities.

Qualified and seasoned teachers should teach the Professional Education and Content courses so that the college will continue to produce graduates with employable skills. The College should regularly conduct program reviews and assessment, not only of its BEED program but for all other programs, in the context of the whole improvement of the College for the purpose of raising standards and improving outcomes for its graduates.

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