

## Instructional Resources of Teacher Education Programs in the Philippine Higher Education Institution Towards Quality Teaching and Learning

Jeanno Manzano

College of Teacher Education, Ilocos Sur Polytechnic State College, Philippines

\*Corresponding email: [manzanojeanno@gmail.com](mailto:manzanojeanno@gmail.com)

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**Abstract: Instructional Resources of Teacher Education Programs in the Philippine Higher Education Institution towards Quality Teaching and Learning. Objective:** Instructional resources play an important function in delivering quality teaching and learning, thus, there is a need for its continuous assessment and improvement in order to meet the diverse needs of the Teacher Education Programs as emphasized in this research paper. **Methods:** This descriptive study employed quantitative techniques to assess the status of teacher education curricula in terms of instructional resources. Respondents were the graduating students, faculty members, and administrators from the Teacher Education Programs. **Finding:** In the assessment, it was concluded that the College had satisfactorily provided the instructional resources for the enrichment of students' skills and capabilities that will better train them as a future teacher. **Conclusion:** Quality teaching and learning is manifested by a classroom instruction enriched with varied strategies appropriate to the students' needs and capabilities. Physical facilities for athletic and extra-curricular activities were provided and there are laboratories for hands-on training of students.

**Keywords:** teacher education program, instructional resources, physical facilities, curriculum, instruction.

**Abstrak: Sumber Daya Pengajaran Program Pendidikan Guru di Institusi Pendidikan Tinggi Filipina menuju Pengajaran dan Pembelajaran Berkualitas. Tujuan:** Sumber daya pembelajaran memainkan fungsi penting dalam memberikan pengajaran dan pembelajaran yang berkualitas, oleh karena itu, ada kebutuhan untuk penilaian dan peningkatan berkelanjutan untuk memenuhi beragam kebutuhan Program Pendidikan Guru seperti yang ditekankan dalam makalah penelitian ini. **Metode:** Studi deskriptif ini menggunakan teknik kuantitatif untuk menilai status kurikulum pendidikan guru dalam kaitannya dengan sumber daya instruksional. Responden adalah mahasiswa yang lulus, anggota fakultas, dan administrator dari Program Pendidikan Guru. **Temuan:** Dalam penilaian tersebut, disimpulkan bahwa Perguruan Tinggi telah menyediakan sumber daya instruksional untuk pengayaan keterampilan dan kemampuan siswa yang akan melatih mereka dengan lebih baik sebagai calon guru. **Kesimpulan:** Pembelajaran berkualitas diwujudkan dengan pembelajaran di kelas yang diperkaya dengan berbagai strategi yang sesuai dengan kebutuhan dan kemampuan siswa. Fasilitas fisik untuk kegiatan atletik dan ekstra kurikuler disediakan dan terdapat laboratorium untuk pelatihan langsung bagi siswa.

**Kata kunci:** program pendidikan guru, sumber daya pengajaran, fasilitas fisik, kurikulum, pengajaran.

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## ■ INTRODUCTION

Global changes during the last century brought unprecedented innovations in the field of higher education. Higher education institutions (HEI) did not only become repositories of knowledge, but generators of knowledge. Gone were the days when the academe lived in their ivory towers, generating ideas for the sake of knowledge alone. In the 21<sup>st</sup> century, universities are expected to take a more active part to contribute to the empowerment and development of all sectors of society. The main rationale for the creation and maintenance of higher educational institutions is to provide access to more affordable, good quality education to the poor and disadvantaged, to ensure equity of access to higher education while at the same time serving as instruments to development in the regional and national contexts.

On the other hand, the Philippines is one of many countries currently undergoing changes in education landscape, particularly in the application of a global framework like the ASEAN Qualification Frameworks and other worldwide educational equivalencies. Most evident among these is the impact of changes in the educational landscape of the Basic Education curriculum which affect the entire levels of education specifically the teacher education curricula. There are four factors influencing curriculum and instruction; 1) policy changes, 2) emerging new technologies, 3) globalization, and 4) the refugee and immigration issue (Aydin, Ozfidan, & Carothers, 2017). Additionally, it is recommended that: 1) schools must change the structures, culture, and programs of curriculum and instruction to meet the needs of a diverse student body, 2) researchers in higher education institutions must focus their work to help the federal government, state leaders, and school districts decide upon the most appropriate reforms and changes to curriculum and instruction in school settings, 3) more resources from a

variety of sources must be invested in technology-use training so teachers can better prepare students to use technology, especially in the context of new assessments, 4) educators should define and advance an agenda that prepares youth for global citizenship, and 5) the core values of educators must include respect, integrity, commitment and excellence, the promotion of diversity and gender equity, choice, and dignity for all students. Each of these areas provides challenges significant impacts on both school settings and teacher educators. These challenges and the obstacles greatly affect teachers, teacher educators, and policy-makers to assist in meeting each challenge.

With these challenges, inclusion efforts to meet diverse needs have challenged Higher Education Institutions to provide the necessary instructional resources to further improve the teaching and learning process. This is anchored on the premise that teacher training is impactfully delivered if instructional resources are well provided. Physical, academic and classroom services are the three main components of school environment. That play an important function in teaching and learning process. And significant impact on students' achievement. (Mahmood & Gondal, 2017). The students' achievements are significantly influenced by the standard instructional resources of the school. The school infrastructures have the positive effect on students' academic performance. Students from schools with good infrastructure performed better academically than students from schools with poor infrastructure. (Mahmood & Gondal, 2017). The equipment of the school as well as instructional resources stimulus significantly academic performance of the students thus school physical infrastructure was a basic key to success and helpful for real teaching learning process of a schools. (Koroye, 2016).

It has been noted that emerging educational practices and growing demand from education

researchers and learners appear to be driving a shift toward the learner and context-centered teaching approach. Higher education is transitioning delivery from a predominantly teacher-centered mode to a non-traditional learner-oriented one. (Holz-Clause, et.al. 2015) Through the years, it has been noticed that learning greatly affected by external environment wherein physical environment is an important factor to consider. On which the availability of different instructional resources has the potential to stimulate beneficial learning activities (Sawyer, 2006). For example, the successful coordination and integration of information distributed over different resources offers learners opportunities to acquire a deeper level of understanding and to improve their skills in dealing with complexity (Spiro & Jehng, 1990). Thus, instructional resources are potent contributor to a successful implementation of the curriculum. It is very helpful in attaining the set goals of the teaching and learning process which contributed much on the academic performance of students (Kimeu, Tanui, & Ronoh, 2016).

Further, the available school physical facilities influence on the quality of education (Afework and Asfaw 2014). The material facilities are required for the students and essential for the establishment of the school organization. The school physical facilities such as office, class rooms, staff rooms, store rooms, wash rooms, ECE rooms, portable water, canteen, library, laboratory, transport, building, boundary wall, sport items, playground, electricity, tablet, LED/ LCD, IT lab, white boards, plants and mosque play a positive role to operate a school smoothly. Bowers & Urick, 2011 noted that a quality instructional resource motivates and affect the overall academic climate of the schools which influences students' achievements. The stake holders, administrators, supervisors, educators, and policy makers suggested maintenance and repair of school facility has a positive influence

on the improvement of schools at district, provincial and national level. The administrators shall allocate funds for the maintenance of facilities for the betterment of schools.

Noticeably, the teachers' effectiveness and the students' achievements are directly affected by the school facilities (Schneider, 2003). The school facilities affect teaching and learning process. Provision of facilities with poor conditions put more hurdles in delivering and conveying education to the students. Facilities of school directly influence on teacher's health and their career decisions. No doubt that the school facilities add positively to the process of education. Students in the schools with better facilities performed better in co-curricular activities, thus increasing educational performance. The states of infrastructure, facilities and level of achievement of the student at secondary level reveals that with better facilities, students performed better in co-curricular activities, thus increasing educational performance. (Akhtar and Tariq, 2015) Thus, a quality instructional resource motivates and affect the overall academic climate of the schools which influences students' achievements. The stake holders, administrators, supervisors, educators, and policy makers suggested maintenance and repair of school facility has a positive influence on the improvement of schools at district, provincial and national level. The administrators shall allocate funds for the maintenance of facilities for the betterment of schools. (Bowers & Urick, 2011)

The teaching and learning processes established an important link between school inputs and students' performance. The effect of quality of school physical facilities on teaching and learning operation. (Urwick and Janaidu 1991) The school physical facilities promote the quality of teaching and learning for enhancing quality education. These physical facilities significantly influence student's achievement (Hasbullah,

Yusoff, Ismail & Vitasari, 2011). The infrastructure of the school including the building of a schools as well as the class rooms are considered very essential part of the institution. The physical environment of school such as spacious classrooms, attractive school buildings, and better facilities reduce tension, depression, frustration and anxiety. The conditions regarding the facilities of a school have tangible effect on student's achievement and learning effectiveness (Earthman, 2002). Better conditions of school buildings enhance the teaching and learning environment. Overcrowding in school buildings and classrooms put hurdles in the students learning. Small class size also enhances student's achievement through maximizing teacher student interaction. Students cannot perform better in noisy classrooms. Poor school facilities put a negative influence on overall climate which in turn effect students' academic achievement and teacher performance.

Nonetheless, the basic physical facilities of a school play an important and positive role for the high achievement of the school children. The (Nez,et al 2013) school size as well as physical infrastructure effect the attitude and the process of personality development of the students. Physical facilities improve confidence level and student's potential. In the same way, institutional facilities effect the social as well as sociological development process of students. They also noted that infrastructural physical facilities play a pivotal role in student's academics, participation in co-curricular activities, making lectures participative, attendance and extension of learning activities. These facilities also act as the motivating factor towards behaving patterns including of stress, tension, frustration and negativity towards others the students interact with. It remained the most vibrant factor of students' achievement. The facilities like laboratory, library, school buildings and white boards play very essential for higher academic achievement. (Owoeye & Yara, 2011).

The school physical facilities stand for the real equipment that assist and promote teaching learning process within the institution. The physical facilities include school buildings, teaching aids and laboratory equipment influence on academic achievement. (Akhiehiero 2011)

Undeniably, academic performance, teachers' motivation and creativity has been influenced by the provision of instructional resources, thus its assessment is crucial in determining the factors that will further improve the delivery of quality teaching and learning. In the case of higher education, it is timely and particularly important to assess the existing situation in the curriculum and instruction, provision of physical facilities and laboratories. The result of its assessment will greatly contribute to the improvement of services and will surely redound to a quality output in higher education. Thus, this paper aims to assess the status of the curriculum and instruction, physical plant and facilities; and laboratories as instructional resources in the Teacher Education Programs in one among the higher education institution in the northern part of the Philippines to further promote quality and excellence in providing educational services to the students and other stakeholders.

## ■ METHODS

### Participants

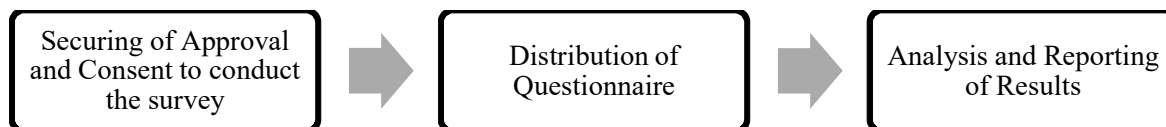
Respondents of the study are students, faculty members and administrators of Ilocos Sur Polytechnic State. The stratified random sampling technique was used to afford each of the population the equal and independent chance to be involved in the study, and to achieve greater accuracy in the estimation of sample size. Total respondents of the study are 120 students, 34 teachers and 15 administrators.

### Research Design and Procedures

This study made use of a quantitative type of research design specifically descriptive-survey

research design wherein survey questionnaire was given to the respondents upon securing an approval from the director of the higher educational institution. The research was conducted during school year 2021-2022. The respondents agreed to the terms and conditions of this research endeavor, each of them signed a

waiver willingly participating and allowing the researcher to use the gathered documents and data for the purpose of this study. The data gathered was treated with utmost confidentiality and was used solely for the realization of the study. This is followed by the analysis of data gathered and reporting of results.



**Figure 1.** Research procedure

### Instrument

Questionnaire was used as a survey instrument to gather pertinent data for this paper. It made use of a survey questionnaire, which is composed of three parts; Part I assess the curriculum and instruction, Part II was focused on evaluation of the provision of physical facilities and Part III was identification of laboratory provisions. It was a researcher-made instrument to ably describe the instructional resources and assess the satisfaction of the respondents on

curriculum and instruction, physical facilities and laboratories. The questionnaire was validated by a group of experts in the field of educational management. A pilot study was undertaken within four-week interval to ascertain the reliability. The reliability coefficient of the questionnaire was found to be 0.82 and 0.79 respectively by test-retest method which means the questionnaire was highly reliable. The respondents were asked to rate the items on a 5 point-scale as follows:

Numerical Rating	Statistical Range	Descriptive Rating
5	4.20-5.00	Very Satisfactory provided/undertaken
4	3.40-4.19	Satisfactory provided/undertaken
3	2.60-3.39	Fairly provided/undertaken
2	1.80-2.59	Poorly provided
1	1.00-1.79	Not provided

### Analysis of Data

The data gathered in this study was analyzed and interpreted using: (1) frequency count and percentages, (2) mean was used to determine the strategies of teachers which was helpful in enhancing lifelong learning practices of the respondents. The result was analyzed using

Microsoft Excel and IBM Statistical Package for Social Sciences (SPSS) version 27.

Mean and standard deviation were used in this study to determine 1.) the level of satisfaction of the respondents in terms of curriculum and instruction, 2.) the assessment on the provision of physical facilities and 3.) status of laboratories.

## ■ RESULTS AND DISCUSSION

### Curriculum and Instruction

Curriculum enhancement were undertaken by Higher Education Institution (HEI) which resulted to the implementation of an enhanced curricula taking into consideration the competencies that need to be developed in the formation and training of students enrolled in the teacher education programs. Table 1 presents the status of the curriculum and instruction of the Teacher Education Programs. The curriculum and instruction are satisfactorily provided with mean values ranging from 3.95 as the highest and 3.71 as the lowest. The HEI had satisfactorily provided classroom instruction which is enriched with varied strategies that are appropriate to the needs and capabilities of the students. It also allows the accommodation of students with special needs and assists them to finish their degree through the use of varied strategies and multi-sensory materials and computer-assisted instruction.

Faculty members perceived that curriculum and instruction was satisfactorily provided as they posted the highest mean rating of 3.87 followed by the students with 3.86. The overall mean rating of 3.87 reflects that the HEI is satisfactorily providing curriculum and instruction to the student. Professional and technical competencies of faculty members along pedagogy were also enhanced through seminar workshops and trainings. Pedagogical knowledge, skills and values of faculty members towards a student-centered approach in teaching were applied. Syllabi were revisited to assess the compliance on the standards in the implementation of an integrative strategies in teaching.

In the case of HEI, graduates began their teaching career in the pattern of what they have learned from their preparation programs and imbedding their student-teaching experiences. This premise makes the curriculum imperfect but teachers need to prioritize skills and knowledge

in curriculum and instructional designing. In this perspective identification of priorities aligned in a unified curriculum and instructions shall be part of its content and performance standards (Petrina, 2007).

The initiatives along curriculum and instruction are evident in the curriculum content comprehensive and updated syllabus, program of study, classroom instruction and varied multi-sensory materials. Taken as a whole, these are essentials in the professional and technical preparation of graduates. This finding implies that the teacher education curricula is student-centered, caters students' diversities and special needs thus faculty members were delivering classroom instruction with varied strategies. This finding conforms with Holz-Clause, et.al. (2015) that emerging educational practices and growing demand from education researchers and learners appear to be driving a shift toward the learner and context-centered teaching approach. Higher education is transitioning delivery from a predominantly teacher-centered mode to a non-traditional learner-oriented one. With this, instructional development (ID) should be implemented. It is a design and implementation of learning environments and instructional products based on constructivist perspective (Wilson, 1995). It emphasized several factors like inseparable implementation and design; understanding curriculum and its value; designing a framework for solutions; self-reflection and understanding should be emphasized to students learning; and designing a possible program with high impacts.

### Physical Plant and Facilities.

Support structures is a vital component of the teaching and learning process. This enables the implementation of programs and activities. Buildings equipped with emergency/fire escapes, a well-ventilated classroom, offices with the necessary facilities, equipment and supplies and

**Table 1.** Status of the curriculum and instruction of the teacher education programs

<b>A. Curriculum and Instruction</b>	<b>STUDENTS</b>	<b>ADMINISTRATORS</b>	<b>FACULTY</b>	<b>MEAN</b>	<b>DE</b>
The curriculum content reflects the depth and breadth of the professional and technical preparation required of its graduates.	3.90	3.75	4.00	3.75	<b>SP</b>
There is a comprehensive and updated syllabus.	3.90	4.00	4.50	3.91	<b>SP</b>
The program of study allows the accommodation of students with special needs and assists them to finish a degree.	3.99	3.75	3.90	3.93	<b>SP</b>
Classroom instruction is enriched with varied strategies that are appropriate to the needs and capabilities of the students.	3.76	4.00	4.00	3.95	<b>SP</b>
Varied multi-sensory materials and computer are utilized for instruction.	3.76	3.75	2.90	3.71	<b>SP</b>
Overall Mean	3.86	3.85	3.86	3.87	<b>SP</b>

Legend: DE – Descriptive Equivalent; SP – Satisfactorily Provided

the availability of function areas are requirements in the establishment of a conducive learning environment. Aside from these, physical facilities that are conducive to better performance of students shall provide and maintain a safe, clean, and creative educational environments. These facilities make the best atmosphere in which students and teachers work and learn (Sephania, Too, & Kipng'etich, 2017).

Table 2 depicts the status of the physical plant and facilities particularly in the implementation of Teacher Education Curricula.

Looking closely at the table, the College satisfactorily provided physical plant and facilities with mean that ranged from 3.73 as the highest to 3.25 as the lowest. Findings reveal that the HEI satisfactorily provided buildings that are equipped with emergency/fire escapes, classrooms that are well-ventilated, offices which are provided with the necessary supplies, equipment and furniture. The classrooms are well ventilated and provided with standard-sized furniture and other needed supplies (chalk, eraser, etc) Among the respondents, administrators



perceived that the HEI's physical plant and facilities is satisfactorily provided as they exhibited the highest mean rating of 3.80, followed by the students with 3.56 and the teachers with 3.18. It is important to note that teacher's evaluation posted the lowest mean because they are the lead players that experience the real scenario inside the classroom. Varied perceptions of respondents reflect the necessity to provide provisions for physical plant and facilities. The gap reveals the status of satisfaction in terms of the existence and availability of these structures and systems. It further demotes that upgrading through continuous maintenance of the existing facilities should be of primordial concern. An overall mean rating of 3.51 describes the physical plant and facilities as satisfactorily provided/undertaken.

With this, Naz, et.al. (2013) also concluded that the basic physical facilities of a school play an important and positive role for the high achievement of the school children. The school size as well as physical infrastructure effect the attitude and the process of personality development of the students. Physical facilities improve confidence level and student's potential. In the same way, institutional facilities for instance physical in addition to instructional, effect the social

as well as sociological development process of students. It is then expected that student will be motivated and perform well in their academics (Akamolafe, & Adesua, 2016). It is expected that quality instruction is basically involving physical, human and material resources to motivate students towards learning. Focus on budget prioritization should be given to establish physical facilities that are conducive for teaching and learning. Nonetheless, consideration should be given to the utmost purpose of teaching and learning process to bring an improvement in learner's behavior and critical thinking (Anifowose & Lawal, 2013). It is then expected that quality teaching and learning is possible in an environment structure to facilitate learning, on which in this case the ideal scenario for teaching and learning to take place, there must be adequate infrastructure to further assure its impact to student learning standards (Khalil, Husin, Nawawi, 2012). It is then assumed that teacher education programs could produce quality graduates due to the satisfactory provision of physical facilities because this is fundamental factors in better learning and achievements of the students (Saeed and Wain, 2011).

**Table 2.** Status of the physical plant and facilities

<b>Physical Plant and Facilities</b>	<b>Students</b>	<b>Administrators</b>	<b>Faculty</b>	<b>Mean</b>	<b>DE</b>
The buildings are equipped with emergency/fire escapes which are readily accessible from any point of the building.	3.85	3.75	3.60	<b>3.73</b>	<b>SP</b>
The classrooms are well ventilated and provided with standard-sized furniture and other needed supplies (chalk, eraser, etc)	3.21	3.75	2.80	<b>3.25</b>	<b>SP</b>



Offices are furnished with the necessary facilities, equipment and supplies.	3.57	3.75	3.30	<b>3.54</b>	<b>SP</b>
Function rooms, reception rooms and waiting areas are available.	3.46	4.00	3.20	<b>3.35</b>	<b>SP</b>
Facilities for athletic and military training activities are provided.	3.69	3.75	3.00	<b>3.48</b>	<b>SP</b>
<b>Overall Mean</b>	<b>3.56</b>	<b>3.80</b>	<b>3.18</b>	<b>3.51</b>	<b>SP</b>

Legend: DE – Descriptive Equivalent; SP – Satisfactorily Provided

### Laboratory Facilities

Learning resources allow students to explore basic, advanced, and even cutting-edge knowledge in a wide range of disciplines or professions. The availability of laboratory facilities is a must for quality teaching and learning that assures better performance of students. This is specifically true in contributing better performance of students (Dahar and Faize, 2011) especially in science related subjects. The utilization of laboratory facilities enables students to acquire greater knowledge on applying practical concepts, experimenting and proving hypothesis. The existence of laboratories with apparatuses, tools, equipment, instruments and materials for hands-on training of students are recommended to comply to the policies, standards and guidelines for the maintenance of laboratories.

Table 3 exhibits the status of the laboratories in terms of its features like apparatuses, tools and materials, its support services and how it is managed by a competent laboratory technician. In terms of the laboratory features, it listed five aspects with the mean that ranged from 3.68 as the highest and 3.23 as the lowest. Data exhibits that the HEI has satisfactorily provided laboratories required for hands-on training of students. Apparatuses, tools and materials conform to the specifications stated

in the requirement list for subjects. To further improve its laboratories, there is a need to provide shop works for specific technologies. Administrators perceived that the College is providing a satisfactory laboratory as they posted the highest mean rating of 3.80, on the other hand, faculty members would like to further improve the laboratories as they rated the lowest mean of 2.94 therefore, they perceived it as fairly satisfactory. An overall mean rating of 3.41 reveals that the College should provide better laboratories for hands-on training of students and hire qualified technicians/helpers that will maintain laboratory orderliness.

The HEI has to strive efforts in providing laboratories, as these imperatives greatly help in the achievement of students as supported by the findings of Mahmood & Gondal, (2017) wherein they emphasized that learning imperatives like i.e. physical facilities, academic facilities and the school atmosphere enhance better teaching learning process. The students' achievements are significantly influenced by the standard instructional resources of the school. The school infrastructures have the positive effect on students' academic performance. The students from schools with good infrastructure performed better academically than students from schools with poor infrastructure.). The equipment of the

school as well as instructional resources stimulus significantly academic performance of the students as concluded by Koroye (2016). Laboratory is indispensable in teaching of science and attainment of any scientific goals is much dependent on the availability of laboratory facilities and equipment. Laboratory facilities is noted as a place, where hypothetical work is being materialized as learning experiences that involve students in activities such as observing, counting, measuring, experimenting, recording and carrying out experiments. These activities could not be easily carried out, where the laboratory is not well equipped (Hamidu, Ibrahim, & Mohammed, 2014). Modern laboratories, particularly in higher educational institutions, often have contiguous spaces that include wet laboratories, computer laboratories, instruments, write-up spaces, office areas, and other spaces with varying degrees of chemical use and hazards.

Noteworthy to mention that with laboratories, teaching is presumed to be capable of letting students experience activities on its first-hand basis to better understand the content of

the curriculum (Etukudo, 2004) The use of laboratory facilities in learning and teaching activities helps learners acquire the scientific skills in manipulating apparatus or teaching aids. Further, the use of instructional materials which laboratory techniques offer, enhance better understanding of the curriculum content. Experimentation and laboratory activities are good teaching methodology for discovery learning and mastering of abstract skills as well as developing slow learners' curiosity and confidence. Consequently, laboratories critical facilities to ensure authentic and quality teaching and learning, and yet educational institutions like state universities and colleges face difficulties in developing and maintaining high-quality laboratory facilities (Lowe, et.al. 2015) Therefore, lack of laboratory equipment in laboratories is one of the major problems facing science teaching (Ivowi, 1999) It is also predetermined that teachers who are not trained within the scientifically rich environments do not have the capacity to utilize any available resources or improvise in the absence of such.

**Table 3.** Status of the laboratory facilities for teacher education program

<b>Laboratories</b>	<b>Students</b>	<b>Administrators</b>	<b>Faculty</b>	<b>Mean</b>	<b>DE</b>
The program provides laboratories required for hands-on training of students.	3.64	4.00	3.40	<b>3.68</b>	<b>SP</b>
Apparatuses, tools and materials conform to the specifications stated in the requirement list for subjects.	3.55	3.75	3.30	<b>3.53</b>	<b>SP</b>
The equipment, instruments and materials needed in the laboratories are available.	3.44	3.75	3.00	<b>3.39</b>	<b>SP</b>
A laboratory technician/helper is					

available for the proper upkeep of the laboratory.	3.47	3.75	2.50	<b>3.24</b>	<b>SP</b>
There is a laboratory for shop works for specific technologies.	3.46	3.75	2.50	<b>3.23</b>	<b>SP</b>
<b>OVERALL MEAN</b>	3.51	3.80	2.94	<b>3.41</b>	<b>SP</b>

Legend: DE – Descriptive Equivalent; SP – Satisfactorily Provided

## ■ CONCLUSIONS

Instructional resources of teacher education programs in one among the Higher Educational Institution in the Philippines is satisfactorily provided in terms of curriculum and instruction, physical plant and facilities and laboratories for the enrichment of students' skills and capabilities that will better train them as a future teacher. Classroom instruction is enriched with varied strategies that are appropriate to the needs and capabilities of the students. Facilities for athletic and military training activities are provided. Apparatuses, tools and materials conform to the specifications stated in the requirement list for subjects

Teacher education programs provides physical facilities and laboratories that required for meaningful hands-on training of students which enriches the delivery of a quality curriculum and instruction. Instructional resources which are adequately provided exposed students to become well-equipped teachers. To further improve the instructional resources, the following shall be considered, to wit: (1) provision of varied multi-sensory materials and computer to be utilized for instruction, (2) the classrooms should be well ventilated and be provided with standard-sized furniture and other needed supplies (chalk, eraser, etc); (3) laboratory for shop works for specific technologies. A further investigation is encouraged focusing on the impact of instructional resources on the academic performance of graduates towards a successful licensure examination.

## ■ REFERENCES

- Afework, T. H., & Asfaw, M. B. (2014). The availability of school facilities and their effects on the quality of education in government primary schools of Harari regional state and east Hararaghe zone, Ethiopia. *Middle Eastern & Afriician Journal of Educational Research*, Issue No. 11.
- Akomolafe, C. O., & Adesua, V. O. (2016). The impact of physical facilities on students' level of motivation and academic performance in senior secondary schools in south west nigeria. *Journal of Education and Practice*, 7(4), 38-42.
- Anifowose M.O. & Lawal P.O. (2013), "State of facilities in Nigerian tertiary educational institutions" *Journal of Technological Research* vol. 8 no. 1
- Aydin, H., Ozfidan, B., & Carothers, D. (2017). Meeting the challenges of curriculum and instruction in school settings in the United States. *Journal of Social Studies Education Research*, 8(3), 76-92.
- Bowers, A. J., & Urick, A. (2011). Does high school facility quality affect student achievement? A two level hierarchical linear model. *Journal of Education Finance*, 37(1).
- Dahar, M.A. & Faize, F.A. (2011). Effect of the availability and use of science laboratories on academic achievement of students in Punjab (Pakistan). *European Journal of Scientific Research*, 52(2), 193-202.
- Earthman, G.I. (2002). school facility conditions

- and student academic achievement. california: william watch series.
- Etukudo E.U.(2004). The effect of Laboratory and discussion methods of teaching on students performance in mathematics at the secondary school level. *Journal of Teacher education* 12:32-37
- Hamidu, M. Y., Ibrahim, A. I., & Mohammed, A. (2014). The use of laboratory method in teaching secondary school students: A key to improving the quality of education. *International Journal of Scientific & Engineering Research*, 5(9), 81-86.
- Hasbullah, A., Yusoff, W. Z. W., Ismail, M., & Vitasari, P. (2011). A framework study of school facilities performance in public primary school of Batubara district in Indonesia. *Procedia-Social and Behavioral Sciences*, vol. 15.
- Hasbullah, A., Yusoff, W. Z. W., Ismail, M., & Vitasari, P. (2011). A framework study of school facilities performance in public primary school of Batubara district in Indonesia. *Procedia-Social and Behavioral Sciences*, vol. 15
- Holz-Clause, M., Guntuku, D., Koundinya, V., Clause, R., & Singh, K. (2015). Current and future trends in higher education learning: Implications for curriculum design and delivery. *Handbook of research on enhancing teacher education with advanced instructional technologies*, 277-292.
- Ivowi, V.M.O.(1999). Beyond enriching science, technology and mathematics educational content.40th annual conference proceedings of science teachers association of nigeria
- Khalil, N. Husin, H.N. & Nawawi, (2012) A. Evaluation and concept of building performance towards sustainability in Malaysian higher institution. *Journal of environment behavior studies*, vol. 3, no.8 [18] Kenneth T. and Jeffery A.C. (2006). Educational F
- Kimeu, R. M., Tanui, E., & Ronoh, A. (2016). Influence of instructional resources on secondary school students' academic performance in Makueni County, Kenya.
- Koroye, T. (2016). The influence of school physical environment on secondary school students' academic performance in Bayelsa state, *Asian Journal of Educational Research*, 4(2).
- Lowe, D., Dang, B., Daniel, K., Murray, S., & Lindsay, E. (2015). On the viability of supporting institutional sharing of remote laboratory facilities. *European Journal of Engineering Education*, 40(6), 611-622.
- Mahmood, T., & Gondal, M. B. (2017). Effect of school environment on student's achievement: Cross comparison of Urdu and English medium classes in Punjab province. *Pakistan Journal of Education*, 34(1).
- National Research Council (US) Committee on prudent practices in the laboratory. (2011). laboratory facilities. In *Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards: Updated Version*. National Academies Press (US).
- Naz, A., & et.al. (2013). Assessing the consequential role of infrastructural facilities in academic performance of students in Pakistan. *International Journal of Social Science & Education*. 3(2). Naz, A., Khan, W., & Khan, N. (2012). Relational analysis of physical facilities in government schools and their impacts on student's academic achievements and behavioral development in Malakand division. *Pakistan Journal of Education* 29(I&II).
- Owoeye, J. S., & Yara, P. O. (2011). School facilities and academic achievement of

- secondary school agricultural science in Ekiti state, Nigeria. *Asian Social Science*, 7(7).
- Petrina, S. (2007). Curriculum and instruction design. In *Advanced Teaching Methods for the Technology Classroom* (pp. 251-279). IGI Global.
- Saeed M, Wain KUrR (2011) Status of missing physical facilities in government schools of Punjab. *J. Res. and Reflec. In Educ.* 5 (2):105-127.
- Schneider, M. (2002). Do school facilities affect academic outcomes? USA: Educational resources information centre. schneider, m. (2003). linking school facility conditions to teacher satisfaction and success. USA: Educational Resources Information Centre.
- Sephania, N., Too, J. K., & Kipng'etich, K. J. (2017). Perception of teachers on availability of instructional materials and physical facilities in secondary schools of Arusha District. *Tanzania. Journal of Teachers*, 4(28), 68-102.
- Urwick, J., & Janaidu, S. U. (1991). The effect of school physical facilities on the process of education: A qualitative study of Nigerian primary schools. *International Journal of Educational Development*, 11(1).
- Wilson, B. G. (1995). Situated instructional design: blurring the distinctions between theory and practice, design and implementation, curriculum and instruction.

