HERCULEAN JOURNAL
INTERNATIONAL MULTI-DISCIPLINARY RESEARCH JOURNAL
Vol. 1 No. 2

A Comparative Evaluation of the Technical Education System of the Philippines and England: An Integrative Literature Review

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ABSTRACT

Skills and Competencies are necessary to effectively and efficiently discharge the duties and responsibilities of an employee in the work place, thus necessary skills should be acquired by the trainees and the technical education system is vital in this regard thus this study was conceptualized to investigate and compare the Technical Education System of England and the Philippines. An integrative literature review was used in this study in which the researchers' gathered literatures from the reputable sources in the internet such as the Embase, EBSCO, ProQuest, PubMed, Science Direct, Scopus, and Emerald Insight. Upon review of the gathered literatures using the given inclusion and exclusion criteria analysis were done. The result shows that, there were similarities in the context of technical education such as the focus of the curriculum, the teachers and the assessment but there were also differences such as the availability of the resources in which England has more than the Philippines.

Key words: Interprofessional, competencies, skills, health education, assessment, emotional skill, technology

INTRODUCTION

The main focus of every educational system, whether domestically and overseas, has been on providing high-quality instruction. In its purest form, quality education entails raising academic standards in order to achieve academic excellence. When there is a highly effective curriculum, enough material resources, and excellent school leaders and instructors, educational excellence is demonstrated (Alferez & Palmes, 2012).

The Enhanced Basic Education Act (RA 10533) was enacted into law in 2013 with the goal of reforming the Philippine educational system to be on par with international standards, such as in the case of England. The purpose of RA 10533 was to reinforce the curriculum in order to enhance the nation's educational system. This law's Senior High School Program, which included Grades 11 and 12 to make pre-college education mandatory for 13 years, is a crucial component. The SHS program, which was launched in 2016, aims to generate students who are wholly developed, outfitted with 21st-century abilities, and prepared for the future, regardless of their chosen routes, whether it be higher education, acquiring middle-level skills, work, or

entrepreneurship. Two years of specialized upper secondary education are included in the SHS. It is a program where students can select a specialty based on their aptitude, interests, and level of schooling. The disciplines that students must take, which will either fall under the core curriculum or specialty tracks, will depend on the professional route they choose. The student can select one of four tracks under the current system, including academic, technical vocational livelihood, sports, and arts and design. The track for technical-vocational livelihood includes specializations in the fields of agriculture and fishing, clothing, tourism, health, processed foods and beverages, social and community development service, automotive and land transport, construction, electronics, furniture and fixture, metal and engineering, utilities, and information and communications technologies. (DepEd Order No. 21, series 2019). The Senior High School program's TVL track exposes students to the acquisition of tangible skills, abilities, and values that may be used to generate income (Brillantes et.al, 2019). Through highly qualified competent professors, it seeks to equip students with academic knowledge, technical vocational training, and skills to prepare them for the demands of the community and the global workplace.

No evaluation of the implementation of the Technical Vocational Livelihood track has been done since the rollout of the Senior High School program in the Philippines. In light of the aforementioned justification, the researcher believes it is essential to evaluate the current state of the TVL track's implementation and contrast it with the England's concept already in place so that any conclusions can be used to enhance the program's action planning, policy formation, and development. The technical vocational livelihood track's implementation shortcomings will be found in this study, which will focus on the program's input, process, and output. These inconsistencies will make school administration take a deeper look at the issues raised and offer long-term remedies. In the end, this study will be beneficial to technical vocational track students since they will be the ones who directly benefit from any program improvements, including but not limited to the provision of material resources and enhanced teaching and learning techniques.

METHODOLOGY

The review aims to synthesize available data on the Technical Education System of the Philippines and England. The following are measures done to facilitate retrieval of pertinent data from the reviews in the internet.

Eligibility Standards

The inclusion criteria for the studies were as follows: (1) those addressing Technical Education System in the Philippines and England (2) those employing any type of study design, quantitative, qualitative, or mixed-methods; (3) full-text peer-reviewed articles or book chapters published in scholarly journals with no publication date restrictions; (4) those written in English, Filipino, or any other language with an English translation; a. Multiple studies/articles based on a single study are grouped together as a single item (5) Unpublished research, such as dissertations and theses, clinical reports, theory or technique publications, commentaries and editorials.

Search Techniques and Selection of Studies

Utilizing electronic database searches, manual searches, and web searches, relevant studies were discovered. PsychInfo, Embase, EBSCO, ProQuest, Science Direct, Scopus, and Emerald Insight were among the bibliographic databases that were researched. Search terms included *"Technical Education System in the Philippines and England," "Technical Edu cation in England and Philippines"*. Only academic journal articles were chosen. In addition to doing Internet searches utilizing Google Scholar and Philippine-based journal websites, we manually combed through pertinent research's reference lists. Fifty records were retrieved in all. The removal of redundant items. The preliminary screening of article titles and abstracts identified fifteen potentially relevant full-text papers, which were gathered and examined by two reviewers for eligibility. Divergent perspectives on the eligibility screening findings were addressed, and any lingering problems were resolved by a third reviewer. The review assessed the quality of twelve relevant studies (out of a total of fifteen) that matched the inclusion criteria. The PRISMA diagram is used to depict the results of the literature review.

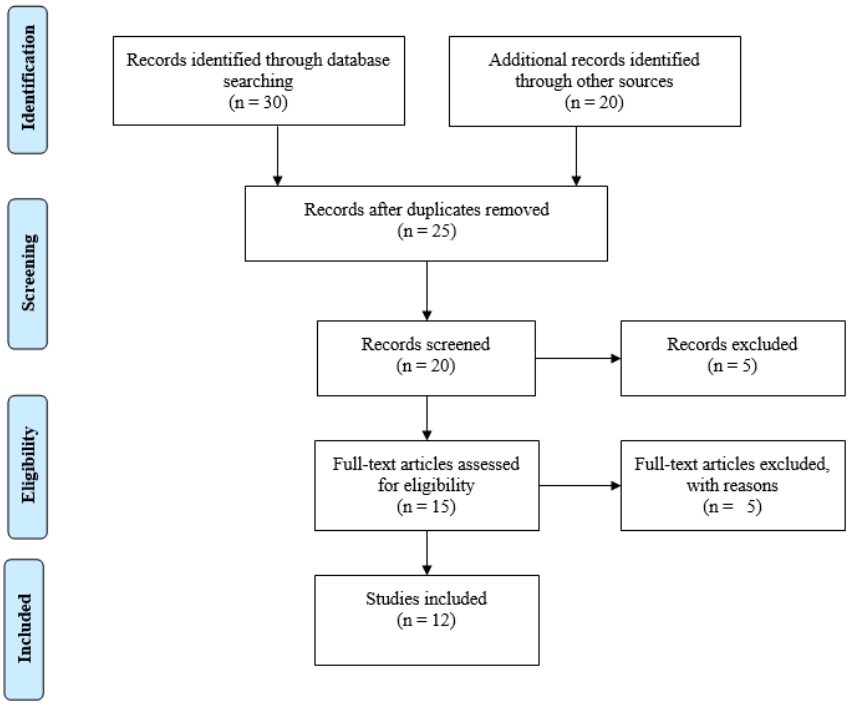

Figure 01: Process of Selecting the Included Literature for this study using the PRISMA

Extraction of data and quality evaluation

A second reviewer double-checked the primary author's data collection. (1) study information (e.g., authors' names, publication date, study location, setting, measurement instruments used); (2) sociodemographic characteristics of participants (e.g., sample size, age, gender); and (3) themes on education, technical education in the Philippines and England. The

quality of each study was independently evaluated using the following criteria: (1) relevance to the research topic; (2) transparency of the technique; (3) robustness of the evidence offered; and (4) validity of data interpretation and analysis. The risk of bias was assessed using two design-specific quality assessment instruments: (1) the Critical Appraisal Skills Program Qualitative Checklist and (2) the Effective Public Health Practice Project Quality Assessment Tool for Quantitative Studies. To ensure the quality of each evaluation, the quantitative and qualitative components of a mixed-methods study were assessed independently.

Data Analysis Strategy

Due to the significant heterogeneity of the studies in terms of participant characteristics, study design, measurement instruments employed, and reporting methods for the key findings, the narrative synthesis method was utilized to interpret and integrate the quantitative and qualitative evidence in the data analysis. Significant methodological constraint of the research included in this review is the lack of consensus regarding the concept of Technical Education System in England and Philippines.

RESULT

The table below will summarize the Technical Vocational Education System of the Philippines and England.

Table 01: Comparison of the Technical Education System of the Philippines and England

Variable	Philippines	England
Curriculum	- Focuses both on soft skills such as communication, critical thinking, customer-oriented aspect. - Employability in early stage - Skills oriented curriculum	
Techers/ Trainers/ Instructors	- Adequate - Less trained	- Adequate - Trained
Instruction and Instructional Materials and	- Inadequate	- Adequate
Assessment	- Focuses on outcomes-based perspective - Output based assessment - Skills based	

The table above shows the comparison of the Philippines and England Technical Education System. Gleaned on the table is that, there are a lot of similarities on the program such as the focus of the curriculum, the assessment process and the instructors however instructors in the Philippines need to be trained further to be more equipped. Major differences belongs to the equipment and materials which shoes that Philippines should venture more on this variable as it reflected that Philippines has inadequate resources, this can be true as the country is still in the first stage of implementing the said programs in the advent of the k-123 program in the educational landscape of the Philippines as compared to England they are now more advanced because they

are already used to it as the k-12 program was long been embedded in their educational perspective.

DISCUSSION

This section will elucidate and give light to the above result from the literature. The data here was categorized based from the theme clustered above for better understanding and to facilitate the presentation of discussions.

Curriculum

The creation of a curriculum involves putting several pieces of knowledge together, including mission and vision statements from educational institutions. The main components of a curriculum are the objectives, substance, methodology, and assessment (Salam, 2015). Vocational programs have traditionally been created to prepare students for a single occupation (Cedefop, 2012). To shift professions and careers throughout their working lives, people entering the workforce in the 21st century need a variety of abilities in addition to their current job skills. Additionally, several pathways for vocational education have been created with the idea that students can go on to pursue post-secondary education, possibly even at the university level. The general subjects covered by this transition from specialized occupational training to broader preparation for employment or further study have expanded in a vocational program (Chae & Chung, 2009).

The Philippines ang England Technical Education System has both main objective which include literacy and numeracy requirements. In addition to technical skills, many aims to develop the “soft” skills that employers want, such as an ability to work in teams, communicate with customers, and think critically. For example, the core curriculum includes an understanding of other countries and cultures (Cedefop, 2012); the promotion of standards and sustainable development; the use of information technology; entrepreneurship; high-quality and customer-focused activity; consumer skills; and the management of occupational health and safety. Although vocational studies typically still receive more time in curricula than general subjects, there is enough attention to academics to ensure that students are ready for post-secondary education or can reach readiness with a few extra studies (Constant, Culbertson, Luoto, & Vernez, 2012).

Techers/ Trainers/ Instructors

Omekwe (2009) as cited by Ramos (2016) stressed that to effectively implement any education program, adequate human and material resources must be available to the schools. In particular, a large enough number of trained teachers with different types of expertise (science, language, technology, etc.) must be recruited and posted to the schools as and when required. In addition, for effective management, academic staff must be complemented by non-academic staff in proportionately adequate numbers.

Click (as cited by Castillo, 2012) shows that in the Philippines some beginning teachers or may be some leaders are at survival level as the technical vocational perspective in the country is begin challenged because of the new structured k-12 program of the government. They just try to get through the difficulties of each day. It is therefore suggestive that trainings and workshops can help them to move to new levels of effectiveness and can give them anew enthusiasm in carrying out jobs. Training can furnish some new tactics and strategies that minimize stress and decrease burnout. Unlike the perspective of England, there has been enormous trainings and workshops for their instructors because the concept of k-12 program is already embedded in their system long period of time.

However, in a broader context, both educational landscape of the Philippines and England in terms of adequacy of input, administrators and teachers was found to be very adequate as it can able to hold classes and trainings simultaneously to all the track of the learning stands. The data implies that the technical landscape of both the Philippines and England has an adequate pool of administrators and teachers who are more qualified to implement the program. This is supported by the study of (Kong, 2017) which posited that schools offering TVL specializations have teachers who are very competent and qualified to teach the subjects assigned them.

Physical Facilities and Materials and Resources

In the Philippines the major problem facing technical and vocational education includes inadequate quantities of equipment, machines, tools and instructional materials (Osuala as cited by Castillo, 2012). Carrying capacity can be in tertiary purchase of adequate equipment and facilities in our tertiary institutions. The development of capacity, potentials, self-actualization, appreciation and application of knowledge gained to solve practical problems in the fast technological changing society cannot be achieved, if equipment, teaching techniques and devices are not adapted to the demands of the technological and scientific age in which students have to live and function. General considerations in connection with trade and industrial education programs include, but are not limited to the following: Corridor doors into laboratories and related classrooms s accommodate large items of equipment other than the machinery used for instruction. General and specific illumination in all area should be appropriate to the instructional/learning tasks of the specific program and over-all facility design to provide balanced lighting conditions (Castillo, 2012). Naelga and Blane (2017) pointed out the lack of learning materials, facilities and manpower are among the problems that teachers are facing in the implementation of K to 12. The learning materials are not only delivered late or not on time, but the copies are limited; hence, the teachers have taken the initiative to spend their own money to photocopy the workbooks and manuals.

The data from the literature here in the Philippines reveals that there was a low evaluation of the TVL's input in terms of physical facilities, fiscal resources, and instructional materials. Although these items were rated as Adequate in some perspective, the overall ratings obtained were significantly lower than the rest of the inputs. This result implies that school administrators have to take a closer look at these components if they aim a more successful implementation of

the program. Apparently, the literature has varying assessments on compliance of material resources. Although the participants have varying assessments, it is nevertheless significant that compliance in terms of material resources is low. This supports the findings of Brillantes (2019) that there exists an inadequacy of facilities in the Technical Vocational Education program due to procurement issues in the Department of Education and other agencies in the government. The availability of school facilities such as classroom technology and basic equipment is significantly related to student outcomes, which include performance and positive attitudes (Sabit, 2019). Educators and administrators are challenged to optimize the learning environment through its school facilities to ensure a meaningful learning process (Jaminal, 2019)

In contrast, since the context of technical vocation system in England has already been embedded in their system a long period of time, there were minimal challenges in the facilities and materials on this context such as the upgrading of the technological perspective in teaching due to the COVID-19 pandemic and the like but as to the initial and basic things to have, they have smooth process of purchasing and there is an adequate resource to support the learning process of the individual.

Instruction and Instructional Materials and Assessment

Instruction for the Philippines and England are very competent as based on the literature because they are certain that they are giving high quality of inputs into their learners, as supported also by a high performance of their trainees in their skills assessment in the long run of their educational journey. This suggests that the teachers of the TVL track are highly competent individuals who are equipped with the necessary competencies. These findings support the study of Goodwin et al. (2017), which posited that teachers of Techvoc education have more knowledge and deeper command on complex skills.

Also, the extent of teaching strategies and methodologies as a process in the TVL track, teaching strategies and methodologies as very high in accordance to the standard of the technical vocational perspective in both the Philippines and in England. This implies that there is a high level of implementation and use of varied teaching methodologies by the TVL teachers in both countries. Furthermore, assessment process of both in the Philippines and England do not adhere on the usual concept of grading system but it is focused on the acquisition of skills thus output based is necessary. Adherence to the standard assessment to in performing the different task will spell the performance and scores of the trainees.

CONCLUSION

As based on the data gathered from the different literatures included in the criteria for inclusion, this study will shed light into the perspective of technical education system of the Philippines and England. The literatures indicates that while there are many programmatic parallels, like the curriculum's emphasis, the evaluation procedure, and the teachers themselves, those in the Philippines require further training in order to be more qualified. The Philippines

should focus more on this variable as it reflects that the country has insufficient resources. This is possible given that the country is still in the early stages of implementing the said programs. However, with the introduction of the K-123 program in the educational landscape of the Philippines as compared to England, they are now more advanced because they have more resources.

RECOMMENDATIONS

The following are the recommendations to be offered from the aforementioned data. By providing more pertinent specializations, enhancing the classroom experience through symposia and workshops, and setting up a computer facility for student research and to supplement resources and materials to improve the students' learning experiences, schools can improve the level of TVL implementation in the Philippines. To address the issues posed by the so-called "New Normal," schools may establish a framework for the delivery of techvoc education. It may be possible to undertake other studies of the same kind that focus on the employability of TVET graduates and students. Future studies utilizing a tracer study of TVL track graduates may also be carried out.

REFERENCES

Agrawal, T. (2013). Vocational education and training programs (VET): an Asian perspective., . Asia-Pacific Journal of Cooperative Education, 14(1), 15-26.

Agudon, C. K. E., Medina, J. C. S., Mora, K., & Fontanilla, R. Level of Knowledge and Extent Of Implementation Of Presidential Labor Code Of The Philippines (Decree 442) At International School Of Asia And The Pacific. International Journal of Advanced Research in Management and Social Sciences, ISSN: 2278-6236 Vol. 12 No. 7. Visited at https://garph.co.uk/IJARMSS/July2023/G-3064.pdf

Ahhuy, A. A. L., Lapuz, L. W. M. G., Callores, L. R. F. G., Tejada, M. A. M., & Fontanilla, C. R. C. Responding to The Clients 'plea: The Research and Development Center's (RDC's) Satisfaction and Loyalty Survey. Research in Management and Social Sciences, ISSN: 2278-6236 Vol. 12 No. 7 https://garph.co.uk/IJARMSS/July2023/G-3063.pdf

Albarico, S. E. (2014). Adequacy of Instructional Materials Used by Teachers in Teaching Technology and Livelihood Education. Retrieved from http://icehm.org/upload/6031ED0114516.pdf.

Alferez, R. C., & Palmes, N. D. (2012). Implementation of Strengthened Technical Vocational Education Program- Competency Based Curriculum, Northern Mindanao, Philippines. JPAIR Multidisciplinary Journal Vol. 7.

Ambag, S. (2015). Technical Vocational Education in the Eye of Professionals. Retrieved from https://www.researchgate.net/publication/322386172.

Audu, R., Sukri, M., & Musta'amal, A. (2013). Provision of Workshop Tools and Equipment: Necessity for Technical Vocational Education Graduates Skills Acquisitio . 2nd International Seminar on Quality and Affordable Educaiton .

Brillantes, K. D., Orbeta, A., Abrigo, K., Capones, E., & Jovellanos, J. B. (2019). Status of Senior High School Implementation: A Process Evaluation.

Castillo, R. (2012). "Arts and Trade Program Enhancement in Bauan Technical High School". Unpublished Master's Thesis, Batangas State University, Batangas City.

Cedefop. (2012). Thematic Overview for Finland, Practices to Math VET Provision with Skill Needs.

Chae, C., & Chung, J. (2009). “Pre-Employment VET in Korea in Social Protection and Labour,”. Discussion Paper No 0921, World Bank.

Click, P. (2000). Administration of Schools. USA: Delmar Thomson Learning Pub, Inc.

Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education 6th Edition. New York: Routledge 2 Park Square,Milton Park,Abingdon,OxonOX14 4RN.

Constant, L., Culbertson, J., Luoto, J., & Vernez, G. (2012). Employer Demand for Technical and Vocational Skills in the Kurdistan Region—Iraq.

DepEd Order No. 21, s. 2. (2019). Policy Guidelines on the K to 12 Basic Education Program. Retrieved from http://www.deped.gov.ph

Edmond, A. (2016). Assessment of the Adequacy of Material Resources for Effective Teaching of Building Technology: A Panacea for Promoting Entrepreneurial Skills in Rivers State Technical Colleges. Retrieved from http://eajournals.org/wpcontent/uploads/Assessment-of-the-Adequacy-of-Material-Resources-FOR-EffectiveTeaching-of-Building-Technology.pdf.

Esguerra, E., & Orbeta, A. (2016). The National System of Technical Vocational Education and Training in the Philippines: Review and Reform Ideas. Discussion Paper Series No. 2016-07. Philippine Institute for Development Studies.

Fontanilla, R. C. and Guzman C.R. The Quality of Online Learning Delivery and The Learning Management System of The Medical Colleges of Northern Philippines (MCNP) And International School of Asia and The Pacific (ISAP): A Correlational Study. The Seybold Report ISSN 1533-921, Vol. 18, 06, https://seyboldreport.org/article_overview?id=MDYyMDIzMDgyMjU3NDYxNTg3 DOI 10.17605/OSF.IO/P4NX8.

Fontanilla, R. C., Catuiza, F. L., Nano, A. B., & Adaya, A. V. Nutritional Status to Academic Performance of The School-Aged Children: A Basis for Inter-Collaborative Extension Services Program. The Seybold Report ISSN: 1533-9211 DOI 10.17605/OSF.IO/26F89

Gregorio, M. (2016). Technology and Livelihood (TLE) Instruction of Technical Vocational and Selected General Secondary Schools in Catanduanes. International Journal of Learning, Teaching and Educational Research Vol. 15, No.4, 69-74.

Ike, H., Nwamuo, C., & Ojukwu, U. (2011). Provision of Technical Vocational Training in Formal Education for Sustainable Technology Development. Nigeria. Journal of Nigerian Association of Teachers of Technology,7(3), , 54.

Jaminal, B. D. (2019). The Impact of School Facilities to the Teaching-Learning Environment. SMCC Higher Education Research Journal Vol. 6.

Kong, J. I. (2017). Level of Awareness, Preparedness and Readiness of the Technical-Vocational Institutions in the Implementation of the K to 12 Curricukum in Zamboanga Peninsula. JPAIR Institutional Research Vol. 10.

Leong, P. (2011). Key Reforms in Revitalising Technical and Vocational Education and Training (TVET) in Malaysia. egional Conference on Human Resource Development Through TVET as a Development Strategy in Asia. Sri Lanka: Retrieved on May 5, 2016 from https://goo.gl/spBzX4.

Limon, M. (2016). The Effect of the Adequacy of School Facilites on Student's Performance and Achievement in Technology and Livelihood Education. International Journal of Academic Research in Progressive Education and Development Vol. 5, No.1.

Naelga, S., & Blane, A. (2017). Identification of the Technical Vocational Track Strands to Be Implemented For Senior High School at the District of Claveria-2, Claveria,. Mindanao University of Science and Technology.

Okorie, J. (2000). Developing Nigeria's Workforce. Calabar. Page Environ publisher.

Olabiyi, O. S., Adigun, E. O., & Adenle, S. O. (2008). Assessment of the Adequacy of Training Facilities Used for Vocational and Technical Education in Colleges of Education in South West Nigeria. African Journal for the Study of Educational Issues: 4 (3), , 44-52.

Omekwe, I. (2009). Issues and Problems in the Implementation of Vocational Education Programs in Nigeria. Ilesha: Joja Educational Research Publishers.

Osuala, E. (2004). Foundations of Vocational Education. Nsukka: Cheston Books.

Perez, R. (2018). Becoming Successful K to 12 Implementers: Operational Preparedness of Senior High Schools in Hagonoy, Bulacan, Philippines. JPAIR Multidisciplinary Research Journal.

Sabit, L. A. (2019). The Status of School Facilities for Special Program in the Arts (SPA): Its Influence on the Student Performance. SMCC Teacher Education Journal Vol. 1.

Salam, A. (2015). Input, Process and Output: system approach in education to assure the quality and excellence in Performance. Bangladesh Journal of Medical Science Vol. 14 No. 1.

Salatan, J. (2018). Status of Selected Secondary Schools in the Implementation of Technology and Livelihood Education Program. Retrieved from http://www.ijlter.org/index.php/ijlter/article/viewFile/671/290.

Salleh, K., & Sulaiman, N. (2015). Technical Skills Evaluation Based on Competency Model for Human Resources Development in Technical and Vocational Education. Asian Social Science, 11(16), 74.

Serumu, I. (2014). Challenges of Implementing Technical and Vocational Education and Training Curriculum in Nigerian Universities. Global Advanced Research Journal of Educational Research and Review Vol. 3(5), pp. 098-101.

Tejada, M. A. M., Querol, J. V. P., & Fontanilla, R. C. (2020). Extending The Capacity of An RFID Technology and Real Time Clock in Controlling the Power Distribution Of MCNP-ISAP. *Seybold Report* ISSN: 1533-9211

Tullao, T. S. (2003). Education and Globalization. Makati City: Philippine APEC Study Center Network (PASCN).

Yusof, H., Noor, M., Jalil, N., Mansor, M., & Nordin, J. (2019). Teachers' Perception of Students' Knowledge, Skills, and Attitudes on Global Citizenship. International Journal of Academic Research Vol. 9 No. 9, 153-164