



ON BECOMING TECHNOLOGY AND LIVELIHOOD EDUCATION TEACHERS

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ABSTRACT

Becoming a teacher begins with an intention. Anchored on the theory of planned behavior, this study describes the intention of pre-service teachers to become teachers of Technology and Livelihood Education (TLE) after their studies. Three antecedents of intention were explored such as attitude, subjective norm and perceived behavioral control. Participants were selected purposively based on the presence of intention to perform the behavior in question. Data collection was done through interview. The recorded interviews were transcribed, coded and interpreted using interpretative phenomenological analysis. The findings of this study revealed that the intention to become teachers of TLE is based on three beliefs. The favorable attitude is based on the belief that practical knowledge and skills, including life skills, will be developed once become a teacher in TLE. The favorable subjective norm is based on the belief that family, teachers and friends play an important role in decision-making of becoming a TLE teacher. Moreover, the perceived behavioral control is based on the belief that competent teachers, instructional materials, trainings and seminars on trade skills facilitate the performance of becoming a TLE teacher. In light of these findings, the researcher recommended: (1) likely outcomes or benefits of becoming a TLE teacher, within and outside the teaching career, must be emphasized and reiterated to pre-service teachers; (2) community must be informed about the what and why of choosing teaching as a career specifically in the field of TLE; (3) develop programs to capacitate TLE professors/ instructors to equip them with relevant methodology and technology competencies, update learning resources according to industry requirements, and establish industry linkages.

Keywords: Technology and Livelihood Education, Pre-service TVET teachers, TVET Teacher Education, Intention, Philippines

INTRODUCTION

The future of humanity depends on the quality of education today. Education plays a significant role for what the future will give everyone. It is important that it serves its purpose: to prepare the youth for employment and entrepreneurship.

“Education, or the transmission, acquisition, creation and adaptation of information, knowledge, skills, and

values, is a key lever of sustainable development.” (UNESCO, 2015)

Sustainable Development Goal on quality education targets increased number of youths equipped with technical and vocational skills for decent employment and self-employment by 2030. Undeniably, the Technical and Vocational Education and Training (TVET) is a contributor in realizing such a target. As a driving force for sustainable development, TVET focuses on the acquisition of skills and knowledge that are necessary for the success of the world of work



(Paryono, 2017). TVET prepares people to work in various jobs. Thus, improving their living conditions. Needless to say, it plays a significant role in the country's economic development and growth.

Cognizant of the role of TVET in economy, policies on quality TVET programs have been part of political agenda. Several factors are associated with quality implementation of TVET programs, such as competent teachers and trainers, conducive technical and vocational learning facilities, and responsive TVET curriculum. Among these factors, the quality of TVET teachers and trainers is very important, for it is directly involved in generating skilled workers. There are a number of reasons to argue that vocational learning and teaching is different from academic or general teaching and learning. These reasons include the importance of vocational teaching and learning in the world of work. Thus, competent TVET teachers and trainers are needed to facilitate technical and vocational learning.

“Qualified and motivated teachers and instructors are key for effective learning and are at the heart of TVET quality.”
(UNESCO, 2015)

Quality TVET programs are delivered by competent TVET teachers. Low-quality graduates and unemployment are associated with lack of competent TVET teachers (Sern et al., 2018). TVET teachers should be competent in both technology and methodology. Technology includes the technical and vocational competencies that need to be transferred to students for them to become job-ready. On the other hand, methodology includes classroom/ laboratory/ workshop management, teaching aids utilization, students' assessment and evaluation, and teaching methods selection. TVET teachers' competencies need to be improved to increase their capability to adapt to new technologies and global challenges.

TVET teacher training institutions play a crucial role to produce competent and capable TVET teachers. As the demand increases for competent technical workers, the need for qualified TVET teachers also increases. TVET teacher training programs should prepare future TVET

teachers of future workers. In developing countries like Philippines, the growth of TVET schools has raised the demand for qualified TVET teachers due to the implementation of the enhanced basic education curriculum or K to 12. TVET is coined in Technology and Livelihood Education (TLE) subject in the basic education. The goal of the subject is to prepare basic education students for higher education, middle skills development, employment, and entrepreneurship. TLE has been designed to equip students with basic knowledge, attitudes, and skills in different areas in the world of work, such as Home Economics, Agriculture and Fishery Arts, Industrial Arts, and Information and Communication Technology. It intends to provide authentic and practical experiences that will enable students to gain an understanding of competencies in various economic activities as they relate to the four major areas of TLE.

Students go through exploratory courses during the first and second year of studies in the four areas of TLE, depending on the availability of the resources and facilities of the school and economic needs of the community. Then, students will move on to specializations geared towards the development of competencies leading to Certificates of Competency (COCs) and National Certifications (NCs) being issued by the Technical Skills Development Authority (TESDA) that signify acquisition of middle level skills for gainful employment or business startup.

Cognizant of the above situations, the need for qualified and competent teachers who possess technical, vocational and pedagogical competencies is essential. In response to this call, a teacher education university in the Philippines reinvents one of its campuses to become the country's TLE hub, which envisions to produce innovative TLE teachers and leaders. This study explored how the pre-service teachers in such organization see TLE that led to their decision to pursue and become TLE teachers after their studies. According to Ajzen (2019), to perform a certain behavior, it is important that the intention of performing such behavior must be present within an individual. Three constructs are identified relative to behavioral intention, such as attitude, subjective norm, and behavioral control. The intention of pre-service teachers towards



becoming teachers of TLE was described phenomenologically. As a general rule in the theory of planned behavior, in which this study is anchored, a favorable intention triggers behavior. Intention as the best indicator of a person's readiness to perform a given behavior.

Local studies and research with focus on pre-service teachers in choosing TLE as their field of specialization are not available. The researcher used foreign theses and articles to complete this study. However, careful analysis of data was done to ensure that the findings, conclusions, and recommendations were applicable to the Philippine setting. Thus, this study contributes new ideas related to TVET pre-service teacher education.

According to the theory of planned behavior, human behavior is guided by three kinds of beliefs: beliefs about the likely consequences of the behavior, beliefs about the normative expectations of others, and beliefs about the presence of factors that facilitate performance of the behavior. These beliefs lead to the formation of attitude towards the behavior, subjective norm, and perceived behavioral control, respectively. As a general rule, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person's intention to perform the behavior in question. Given a sufficient degree of actual control over the behavior, people are expected to carry out their intentions when the opportunity arises.

Intention is assumed to be the immediate antecedents of behavior. In this study, the behavior is becoming a teacher of Technology and Livelihood Education (TLE). This behavior is influenced by the intention or the willingness of the pre-service teachers to become teachers of TLE. To understand the intention of becoming a TLE teacher, attitude toward becoming a TLE teacher, perceived subjective norm, and perceived behavioral control will be explored. Understanding these factors could provide inputs for developing interventions or programs to promote the behavior among pre-service teachers. Figure 1 shows the conceptual paradigm of the study.

According to Ajzen (2019), one or more of the determinants of intention: attitudes, subjective norms, perceptions of behavioral control can be directed to design an intervention to change behavior. Changes in these factors, should produce in behavioral intentions and, given adequate control over the behavior, the new intentions should be carried out under appropriate circumstances. This study aimed to provide viable inputs that would help policy makers, curriculum designers or other stakeholders involved in the pre-service TVET teacher education to develop programs that would help promote teaching career in the field of TVET.

OBJECTIVES OF THE STUDY

The primary objective of this study was to understand better the intention of pre-service teachers to become teachers of TLE after they have finished their studies. Guided by the constructs of intention identified by Ajzen (2019), this study sought to:

- 1.) describe the attitude toward becoming a TLE teacher;
- 2.) determine the subjective norm toward becoming a TLE teacher;
- and 3.) identify the perceived behavioral control towards becoming a TLE teacher.

By understanding the intention of pre-service teachers to become TLE teachers, practical inputs were generated to serve as bases to review the current TLE programs for future teachers to make them more responsive to the needs and situations relevant to pre-service teacher education in the field of TVET.

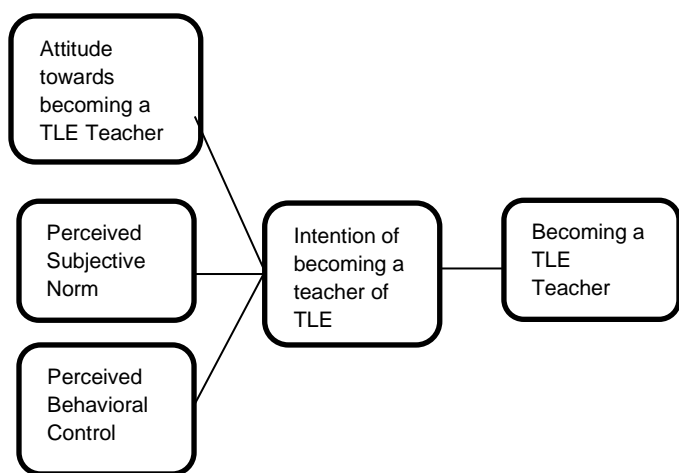


Figure 1. Research Conceptual Framework.



METHODOLOGY

This study employed a qualitative research design to describe the intention of participants toward becoming TLE teachers. Purposive sampling was utilized to select the participants of the study. They were chosen conveniently among the third-year students enrolled in the Bachelor of Technology and Livelihood Education (BTLE) program of a teacher training institution in the Philippines.

Primary data were collected in this study using interview. The recorded interviews were transcribed, coded and interpreted using interpretative phenomenological analysis. The researcher applied to winnow the data, where identified similar ideas and recurring themes from the responses. These keywords served as the basis for the development of the different themes which became part of the findings of the study.

RESULTS AND DISCUSSION

The findings of this study yielded themes and sub-themes that provided a picture of the behavioral intention of pre-service teachers toward becoming TLE teachers.

1. Attitude towards Becoming TLE Teachers

According to Ajzen (2019), attitude towards performing a behavior refers to the belief about the likely consequences of the behavior. Having a favorable attitude leads to the intention to perform the behavior.

In this study, the attitude of the participants toward becoming a TLE teacher was described based on their responses to the question, *what do you think are the advantages when you become a TLE teacher after your studies?*

Participants believed that by becoming a TLE teacher, they would be able to learn knowledge, skills and attitude which are not only essential for teaching the subject but also applicable to their everyday living. Sample statements made by the participants relative to this attitude are:

“The advantage of becoming a TLE teacher is I know the skills not only the

knowledge. Skills that will be used and helped in my everyday life.” (P2)

“I will be able to equip with skills that a TLE teacher must possess. Moreover, TLE exposes us to a wide variety of experiences which are meaningful not only on our professional development but on our personal development as well.” (P5)

“I think it would help me not just in the field of teaching. Also, in everyday living since it is about the knowledge and skills for life.” (P9)

The willingness to become TLE teachers was based on the belief that the subject was a venue for the development of life skills. Sample statements made by the participants relative to this attitude were:

“One of the advantages I see is that I will be able to acquire life skills that are needed nowadays.” (P11)

“As TLE teachers teach life skills to students, I will be able to learn these which will definitely be useful to in my life.” (P12)

“I will be able to put life skills into practice.” (P17)

According to Juarez (2011), the term life skills has no universal accepted definition, as different organizations attach different meanings. The term must be contextualized to understand and apply. In this study, participants viewed life skills relative to vocational and livelihood skills considering their major, TLE, anchored on TVET.

It can be noted that the attitude of the pre-service teachers on becoming TLE teachers was based on the likely outcomes relevant not only to their chosen profession, as teachers but also to the applicability of the competencies to their daily lives. This is supported by the study of Ayaleb (2011), where he stated that a favorable attitude towards technical and vocational education was developed



among students if they experienced practical application and find it relevant to their lives.

The favorable attitude towards becoming a TLE teacher was the result of the awareness of the participant about the likely consequences of pursuing teaching career in TLE. The relevance of such behavior was grounded in the personal view and perceived interest of an individual. Ismail (2013) identified intrinsic and extrinsic motivations influence pre-service teachers in Malaysia to choose teaching career in TVET.

do Paco et al. (2011) found that the attitude toward the behavior has a direct and positive effect on intentions. Hence, education and training should focus on changing personal attitudes and technical knowledge because the effects could be more significant to the process of performing the behavior. Therefore, if an individual holds a positive attitude toward becoming teachers of TLE, considers TLE to be aligned with his/her overall goals in life and sees an opportunity to perform the behavior, then most likely, he/she will form a specific intention. The desirability of choosing teaching career in TLE leads to individuals' attitude toward becoming a teacher of TLE. Such an attitude can be developed and strengthened through information focusing on the personal and professional advantages of becoming one.

2. Perceived Subjective Norm towards Becoming a TLE teacher

According to Ajzen (2019), subjective norm refers to the beliefs about the perceived social pressures or expectations of others. Having a favorable subjective norm leads to the intention to perform the behavior.

In this study, participants were asked with the question, *who do you think are the people or group that would support your decision to become a TLE teacher after studies*, to describe the subjective norm towards becoming a TLE teacher.

As resulted from the interview, participants revealed that family, TLE teachers and friends were the people who supported them to pursue becoming teachers of TLE after studies. It can be noted that the identified people who agreed with the participants' decision to become teachers of TLE were exposed to the world of technology and livelihood. Most of the participants came from the

families whose livelihoods were related to farming, fishing, food business and teaching TLE in Junior High School. Moreover, families of the participants knew that TLE teachers were in demand in K to 12 curriculum and the knowledge and skills gained can be used even they do not pursue teaching after studies. In the study conducted by Saysay (2011), he found out that students make decision about their future career with the approval of their family, especially their parents. The involvement of parents in choosing a career to pursue by their children is significant. Thus, family is an influential factor that impacts pre-service teachers' career decision.

In the study of Alnaqbi (2016), support not only from family but also from friends and teachers is important to develop the intention to pursue vocational and technical courses. They affect the students' view to choose a career in TVET. It can be noted that peer influence could lead to the development of intention of becoming a TLE teacher. From the interview of the participants, they found a circle of friends within their academic program. Considering that the institution where the participants study offers only one program, Bachelor of Technology and Livelihood Education, the group of students were homogenous because they have the same specialization. They speak with the same language when it comes of course requirements, lessons, projects, activities, among others. In this case, they shared common ideas, insights, and experiences related to their journey towards becoming teachers of TLE.

On the other hand, teachers are also seen as one of the factors on deciding what career to pursue after studies. A competent TLE teacher could encourage a positive attitude toward such profession if he/she executes the responsibilities expected for him/ her to execute. By being the role model of the profession, competent TLE teacher portrays the benefits of becoming teachers of TLE. This increases confidences level among youth that the profession is a good career choice (Omar, 2020).

According to Okorie (2011), people choose a job based on social standards. The need to satisfy the expectations of other people is important. It can be noted from the responses of the participants, the identified people have favorable regard towards becoming a TLE teacher.



It was revealed in this study that supportive family, teachers and friends build favorable subjective norm towards becoming teachers of TLE. Hirschi et al. (2013) postulated that individuals follow the norms accepted in their reference groups. If an individual perceives that his/her relatives, friends, or neighbors achieve success in doing a certain behavior, he/she will have a higher follow to follow such behavior.

One of the reasons why TVET is not attractive as a career for young people is that community used to perceive it as second-class education compared to other fields such as medical and engineering (Yunos et al., 2020). It is the role of TVET educators to improve this perception as they are within the community themselves. They must work with the other members of the community, such as family members, to promote the benefits of becoming a TLE teacher. In this study, participants are TLE students who are being prepared to become teachers of TLE. The support system is composed of family, teachers and friends.

3. Perceived Behavioral Control towards Becoming a TLE teacher

According to Ajzen (2019), perceived behavioral control refers to the beliefs about the presence of factors that may facilitate the performance of the behavior. Having a favorable perceived behavioral control leads to the intention to perform the behavior.

In this study, the perceived behavioral control of the participants toward becoming a TLE teacher is described based on their responses from the question, *what do you think are the things that would make easy for you to become a TLE teacher.*

Participants believed that they needed to be trained by competent TLE instructors/professors with complete instructional materials and attendance to industry trainings and seminars for them to become teachers of TLE after studies. Sample statements made by the participants relative to perceived behavioral control were as follows:

“Competent college instructors/professors in TLE.” (P3)

Competent teachers manage to create learning conditions that enhance student's motivation to learn TVET competencies (Yunos, 2020). It is important to note that TVET courses in the TLE teacher education curriculum must be handled by competent TLE instructors/ professors to produce TLE teachers for the lower level of education who were capable to meet the requirement of industries and professional bodies. A competent TLE instructor/professor holds at least a master's degree in Technology Education or its equivalent and compliant with the training regulations of TESDA (CMO no. 78, series of 2017). Technical knowledge and vocational skills are efficiently and effectively facilitated by competent TVET/ TLE instructors/ professors. (Okoye et al., 2015).

The nature of teaching and learning environment in TLE is different from other academic subjects. Anchored on the concept of TVET, TLE is highly emphasized on practical-based. This reality calls for a competent teacher who possess the knowledge, skills, and attitudes of TVET curriculum (Omar et al., 2020).

Another factor that facilitates becoming a TLE teacher is the availability of instructional materials.

“Complete instructional materials...(P16)”

Learning resources include references, tools, equipment and facilities that facilitate acquisition of knowledge and skills. According to Ayonmike (2015), the provision of adequate facilities, equipment, consumable materials, and hand tools; and adequate provision of instructional materials is important to deliver quality TVET programs. This ensures the achievement of the learning outcomes. The absence of these resources hinders effective teaching and learning. The quality of teaching and learning is often compromised when learning resources are not available for students. This impairs the ability of students to master the required knowledge and competencies. Ayonmike et al. (2015), the quality and functionality of vocational education program have been marred by several school related factors including inadequate teaching/learning facilities. However, the issue of lack or limited learning TLE



resources can be augmented by establishing partnership with other institutions or industries. Linkages are the primary solution to fill the gaps in the delivery of TLE courses within the institutions Pardjono et al. (2018).

Another factor that facilitates becoming a TLE teacher was the exposure of students to industry experts.

“Having more trainings and seminar in developing knowledge and skills in TLE.”

Industry experts can be invited to conduct workshop trainings and seminars on trade skills. This is one way to link education with the industry. Pardjono et al. (2018) concluded that schools and industries can help each other by constructing formal collaboration framework to put learning in the workplace. Learning in vocational education equips learners with various competencies to make them job-ready. TVET requires dual-skilled teachers equipped with pedagogy and technology. TVET teachers must collaborate with industry experts to create learning environment for the acquisition of relevant competencies.

Collaboration between teacher training institutions and industries is important to make pre-service TLE teacher education relevant and responsive. Pre-service TLE teachers should experience and expose to technological change as it happens in the actual workplace. In facilitating teacher’s knowledge and skills in pre-service TLE teacher preparation, hands-on and authentic experience must be emphasized rather than exploring the theories and principles inside the classroom. Industries could provide more authentic learning experience than schools or universities. Having partner industries, the real world of work is experienced by the pre-service TLE teachers (Bukit, 2020). Through trade skills seminars and trainings facilitated by industry experts and practitioners, both TLE instructors/ professors and pre-service teachers were equipped with industry-based competencies. Such competencies qualify both parties to undergo competency assessment, leading to national certificates of TESDA. This certification is now part of the requirements that school employers look for TLE teacher-applicants. It is important that technical teacher education

institutions prepare the pre-service TLE teachers not only to pass the Licensure Examination for Teachers, but also for the national assessment on trade skills.

CONCLUSIONS

Preparing teachers for TLE is a complex task, with many determining factors that need to be considered in the implementation of TLE teacher education program. From the findings of the study the following conclusions are drawn:

The intention towards becoming teachers of TLE is founded on three beliefs. Firstly, the favorable attitude of the participants toward the behavior is based on the belief that practical knowledge and skills, including life skills, will be developed once they became a teacher in TLE. It is important to build a connection between the professional and personal lives. To be able to build a favorable attitude towards becoming a TLE teacher, one must know the relevance of the career for future and present lives.

Secondly, the favorable subjective norm is based on the belief that family, teachers and friends play an important role in decision-making of becoming a TLE teacher. Support from these identified people is important to promote the teaching career in the field of TLE. They play a very important role in encouraging a person to pursue a certain behavior. The intention to become a TLE teacher after studies is developed if the important people have favorable perception toward such behavior.

Lastly, the perceived behavioral control is based on the belief that competent instructors/ professors, instructional materials, trainings and seminars on trade skills facilitate the performance of becoming a TLE teacher. These are the perceived factors that would turn the intention of becoming a TLE teacher easier to action or actual behavior after studies.

RECOMMENDATIONS

In the light of the findings and conclusions, the following recommendations were derived: (1) likely outcomes or benefits of becoming a TLE teacher, within and outside the teaching career,



may be emphasized and reiterated to pre-service teachers to develop favorable attitude towards the career; (2) community members may be informed about the *what* and *why* of choosing teaching as a career specifically in the field of TLE. They may also be involved in planning curricular programs in pre-service teacher education. Their ideas will serve as a viable input and feedback to make the curriculum more responsive to the actual and present needs; (3) develop programs to capacitate TLE instructor/ professor with relevant methodology and technology competencies to adapt to new technologies and global challenges in this digital era. In addition to this, updating learning resources based on industry requirements and establishing industry linkages are necessary to promote favorable behavioral control towards becoming a teacher of TLE among the pre-service teachers.

Moreover, it is recommended to conduct follow-up study to determine whether the participants of this study become teachers of TLE after their studies. A similar study may be undertaken in another setting to validate the researcher's findings.

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