



# A Two-Fold Approach in Investigating the Factors in Practice Teaching Experiences of Technology Livelihood and Vocational Education Preservice Teachers

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**Abstract:** Pre-service teacher preparation programs vary greatly across countries. The most important part of a teacher training program is pre-service teaching regarded as the element of teacher training that is most significant and influential. The study aimed to determine the constructs in practice teaching experiences of technology livelihood and vocational education preservice teachers. To accomplish the goal of this study, quantitative research design, using exploratory factor analysis was applied. In addition to employing the Principal Component Analysis (CPA), exploratory factor analysis was also utilized to determine the factor structure of the measure and assess its internal reliability. Nine preservice teachers participated in the qualitative phase of the study, and 153 preservice teachers participated in the quantitative phase using purposive and stratified random sampling techniques. The study revealed the presence of the five components which are themed in factor loadings identified as Implementing Teaching Method, Observing Time Management, Costuming Self-Evaluation, Accepting Feedback, and Battling with Adversities with the Accepting Feedback having the lowest results. The themed factor loadings had a weighted overall mean score of 4.3285, which means that it was always observed. The researchers suggested that teacher education programs help pre-service teachers overcome obstacles they face when teaching, reflect on their practice, and solve problems to prepare them better to transition to in-service teaching. A confirmatory factor analysis is suggested to confirm the study's result under investigation.

**Keywords:** Preservice teachers, technology livelihood and vocational education, exploratory factor analysis

## 1. Introduction

Pre-service teaching is essential to a teacher training program, sometimes called "practice teaching." It is the most significant and essential component of teachers' professional training. (Tantoy & Gemota, 2018). Pre-service teacher education programs significantly contribute to future generations' education by training competent teachers. The initial phase in a teacher's professional growth is provided through pre-service teacher education, which also builds the foundation for the teaching profession. Pre-service teacher education must be completed for a teacher to "fulfil his or her duty and duties efficiently" (Tasdemir et al., 2020). The pre-service teacher gains experience with teaching fundamentals during practice teaching, which involves the cyclical processes of planning, real teaching, and assessing learning. Pre-service education refers to teacher preparation before beginning a career as a teacher (Rubrico & Rubrico, 2020).

This position strongly emphasises the student teaching experience, as seen by instructors' high ratings of student teaching experiences. When pre-service teachers practice what they have learned in their curriculum, education programs will participate in training because they understand that student teaching is crucial to becoming a teacher. Pre-service

teachers can transition from students' well-known and frequently pleasant positions to that of teachers when they participate in approximate practices (Hamilton & Van Duinen, 2019).

One of the difficulties of being a pre-service teacher is needing more time to be ready to teach. Many academics think pre-service teachers have encountered various issues, particularly while transitioning from student teaching to first-year teaching. The seven support areas—administrative assistance, cooperating teachers, student supervisors, peers, students, associated duties, and learning environment—present minor challenges to pre-service teachers. The results also demonstrated that the issues faced by pre-service teachers differ depending on each area of speciality. In addition, as was said in the interview, the challenges pre-service teachers face is caused mainly by individual variations among students, supervisors, and peers, a lack of facilities, and a lack of preparation and training (Napanoy et al., 2021).

A variety of unfavourable features were noted. These unfavourable components often include curriculum, teaching techniques, teacher educators' roles, organisational elements, program structure, and instructional strategies. Remarkably, the disconnect between the study courses that are being taken, the disparity between theory and practice, the duplication of content, the duration of the teaching practice, the lack of articulation between the university and the school, the lack of coordination among the departments, supervisors, and coordinators of the teaching practice, and the mismatch between the study courses that are being taken in the second year of the study program and the demands of pre-service teachers during their teaching practice. Despite the efforts of school administration and instructors, it is typically challenging to overcome these obstacles. Regardless of schools' strategies, specific issues could never be eradicated. Despite this, schools must endeavour to lessen the impact of these issues while enhancing student learning. Being a teacher is a challenging job since many obstacles in the classroom are caused by nature. It is typically challenging to overcome these obstacles despite the efforts of school administration and instructors (Wilson, 2021).

Furthermore, one of the most significant issues pre-service teachers has been their struggle with anxiety with their mentors. Another was about how their mentor's fastidious nature discouraged them and made them reluctant to watch. Some cooperating instructors verified such idealistic and uncaring mentors for reasons they did not discuss. In this instance, several pre-service teachers felt they needed to be directed more effectively, which caused a gulf between them instead of inspiring them to complete observation assignments (Abas, 2016). Conducting a two-fold approach in investigating factors in practice teaching experiences of technology livelihood and vocational preservice teachers is deemed necessary to determine their ventures in coursework preparations and be able to produce a standardised survey tool in assessing their experiences. Previous investigations have used data in quantitative and qualitative approaches separately, and none have used both approaches and exploratory factor analysis. Therefore, there is a gap in the methodology since most of the studies conducted are either qualitative or quantitative.

The study aimed to determine the factors of practice teaching experiences of Technology Livelihood and Vocational Education Preservice Teachers. To fulfil the main objective of this study, a two-fold approach, mainly qualitative and quantitative, was employed. The study employed in-depth Interviews (IDI) to gather significant statements from the respondents, which were used to craft the survey questionnaire. The data was collected in Davao del Norte, particularly in the three selected public tertiary schools offering Bachelor of Technology and Livelihood Education (BTLED) and Bachelor of Technical-Vocational Teacher Education (BTVTED) programs.

It sought answers to the following questions to attain the study's objectives.

- i) What are the demographic profiles of preservice teachers?
- ii) What are the constructs of preservice teachers' experiences during the practice teaching program?
- iii) What is the measure of these constructs based on preservice teachers' experiences during the practice teaching program?

Hypothesis: No factors shape the experiences of Bachelor of Technology and Livelihood Education (BTLED) and Bachelor of Technical and Vocational Teacher Education (BTVTED) pre-service teachers.

## 1.1. Theoretical Framework

The study was anchored on the Situated Learning Theory (SLT), first presented by Jean Lave and Etienne Wenger (1991). The theory describes how learning proceeds and progresses when people can engage in a community of practice. As they have more opportunities to practice within the learning framework, new learners in such a community eventually achieve the level of an expert. Pre-service teachers have several options to study and analyse theory and pedagogy as part of the complicated and continuing process of learning to teach. This is achieved when participating in field experiences in both formal and informal educational settings, such as community-based ones (Hallman & Rodriguez, 2015).

It also promotes a pedagogy that blends experiences to create the necessary gestalts in teacher education. A gestalt is a collection of thoughts, feelings, values, needs, or propensities for behaviour that together make up a whole. It also discusses how first-time teaching experiences often cause student instructors to develop gestalts connected to classroom-based survival abilities (Booth, Guinmard, & Lloyd, 2017). The authors further stated that "learning viewed as a situated activity has as its central defining characteristic a process we call legitimate peripheral participation." They explained that learners invariably engage in practitioner communities where their learning intentions are activated. The meaning of learning is configured through the process of becoming a full participant in a sociocultural practice. Additionally, they

stated that "learners inevitably participate in communities of practitioners, where their intentions to learn are engaged, and the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice" and that "learning as a situated activity has as its central defining characteristic a process, we call legitimate peripheral participation" (Lave & Wenger, 1991).

Furthermore, it was supported by Albert Bandura's Self-Efficacy Theory (1995). According to the idea perceived self-efficacy is the belief in one's ability to plan and carry out the actions necessary to handle potential scenarios. Efficacy beliefs affect how individuals feel, think, behave, and motivate themselves. Pre-service teachers are developing their competence and confidence in their capacity to become experts in pedagogy and subjects during their time in the teacher education program. According to Bandura (1995), "the vicarious experiences provided by social models are an influential way of creating and strengthening efficacy beliefs. He explained that when people witness others like themselves succeed by persistent effort, observers believe they also possess the capabilities to master comparable activities. Ertmer (2005) noted that having access to many models enhances the amount of information about how to perform the performance and the likelihood that spectators would regard themselves as like at least one of the models, improving their confidence in also performing effectively. The abilities obtained by seeing the faculty in the teacher education programs and the mentor teachers in their pre-service field experiences and other pre-service learning opportunities may substantially impact pre-service teachers' self-efficacy judgments (Ertmer, 2005). Moreover, self-efficacy is a key component of pre-service teachers' goal to build not only their knowledge but also to alleviate their fears and increase their emotions of self-efficacy, in addition to the five factors that were provided and created factor loadings.

## **2. Methodology**

To investigate the factors in practice teaching experiences of BTLED and BTVTLED preservice teachers, the study employed a quantitative research design with the Exploratory Factor analysis technique, which covers a range of multivariate methods to explain underlying factors that influence a set of observed variables. The research aimed to identify these underlying factors, and exploratory factor analysis (EFA) was used (Alavi et al., 2020). This approach was appropriate since the researchers employed experimental phase and quantitative methods. These two approaches were used since they fit this study's objectives. The exploratory phase provides critical information for developing specific research questions for quantitative phases involving a research-based evaluation instrument. During the exploratory phase, the purposive sampling technique was used to determine the nine preservice teachers who participated in the in-depth interview.

### **2.1 Sampling and Population**

These participants were chosen based on the following criteria: a fourth-year student who finished practice teaching, enrolled in the three public tertiary schools in Davao del Norte, and took Bachelor of Technology and Livelihood Education and Bachelor in Technical-Vocational Teacher Education. During the quantitative phase, 153 preservice teachers with the same programs and schools responded to the survey and was determined using quota sampling.

### **2.2 Instrument**

The study utilized a researcher made research questionnaire extracted from the statements of the participants during the first phase of data collection. In developing the survey items, one of the important steps that the researchers needed to perform was reliability testing which was utilized to assess the quality of the survey items (Mohamad, et.al., 2023). Consequently, the questionnaire underwent pilot testing and was analysed using Cronbach's Alpha. Results showed that the research instrument had excellent reliability since the Cronbach's Alpha score is .928.

### **2.3 Data Analysis**

The data gathered were treated using the following statistical tools. First, the mean was used to determine the central tendency of the data and was utilized to determine the measures of construct of preservice teachers' experiences during the practice teaching program. Further, exploratory factor analysis was used to produce a smaller number of linear combinations and explore the underlying theoretical structure of the preservice teachers' experiences during the practice teaching program. Specifically, the study utilized the principal component analysis since the researchers transformed the variables to smaller set of linear combinations with all the variance in the variables being utilized.

## **3. Results**

The 46 items of the Experiences of Preservice Teachers during the Practice Teaching Program were subjected to exploratory factor analysis using the principal component analysis. Before performing the analysis, the suitability of the data for factor analysis was assessed by the researchers. Inspection of the correlation matrix revealed the presence of many coefficients of .4 and above. The Kaiser-Meyer-Olkin value was .888, exceeding the recommended value of .6 (Pallant, 2020), and Bartlett's test of sphericity is statistically significant at  $p < .05$ , supporting the factorability of the correlation matrix. In terms of the sample size, the study had 153 preservice teachers coming from three public higher

education institutions in Davao del Norte offering Bachelor of Technology and Livelihood Education and Bachelor of Technical Vocational Teacher Education. Pallant (2011) posited that the overall sample size for EFA should be 150+. The normality Test was not conducted by the researchers since, according to Pallant (2011), to perform exploratory factor analysis, the following assumptions needed to be met: sample size, factorability of the correlation matrix, linearity, and outliers among cases. In terms of the outliers among factors, the outliers were removed after performing the EFA.

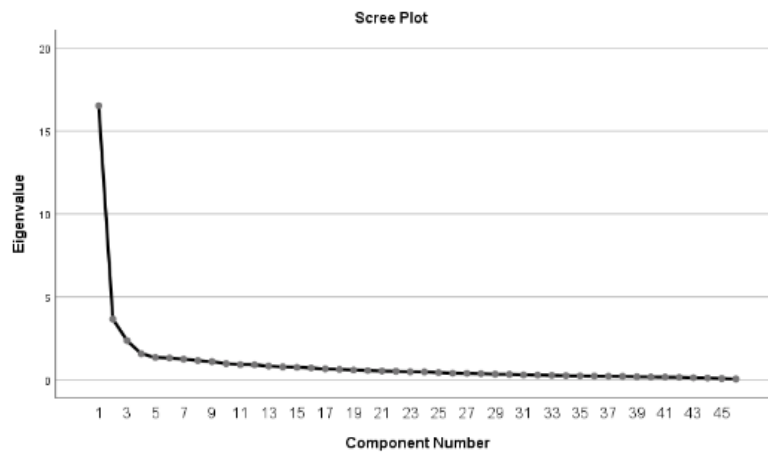
**1.1. Demographic Profile of the Respondents**

The respondents were classified according to the following: school, course, major, gender, and age. 47.06% of the respondents were from Davao del Norte State College (DNSC), with a total of 72 taking BTLEd major in Home Economics, 28.11% of the respondents were enrolled from Santo Tomas College of Agriculture, Sciences, and Technology (STCAST), with a total of 43 taking BTVTED major in Food Service Management; and 24.84% of the respondents were from University of Southeastern Philippines (USEP) Tagum-Mabini Campus, with a total of 38 taking BTVTED major in Agriculture in Crop Production. There were 38 male respondents (24.84%), and 115 female respondents (75.16%). Moreover, 88.89% of the respondents were aged 20-24, 5.88% were aged 25–29, and 5.29% were aged 30-33. The demographic profile of respondents was completed with 100% of respondents.

**1.2. Factor Loadings in Investigating the Constructs of Practice Teaching Experiences of Technology Livelihood and Vocational Education Pre-service Teachers**

Presented in Table 1 are the Factor Loadings in Investigating the constructs of Practice Teaching Experiences of Technology and Vocational Education Pre-service Teachers, which is indicated by five factors: costuming self-evaluation, implementing teaching method, observing time management, accepting feedback, and battling with adversities. Factor loadings show how much a component contributes to explaining a variable, and the loading pattern identifies the factor with the greatest impact on each variable. The 46 items in Investigating Factors in Practice Teaching Experiences of Technology Livelihood and Vocational Education Preservice Teachers were then subjected to Principal Components Analysis (PCA). Principal Component Analysis, or PCA, is a dimensionality-reduction technique frequently used to decrease the dimensionality of big data sets.

The data's acceptability for factor analysis was evaluated before PCA was conducted. According to the component analysis findings, the correlation matrix showed the existence of several coefficients of .3 and above, which, according to the definition given in the research, EFA showed that the Kaiser- Meyer- Oklin value was .888, indicating that the sample size was sufficient to assess the structure of the factors. Bartlett's Test of Sphericity validated the suitability of factor analysis and concluded that the findings were significant, with 0.000 results. Furthermore, the reliability of the questionnaire was also tested using Cronbach's Alpha, and the result showed that Cronbach's Alpha was 928, indicating that the data was reliable. Moreover, the result of the study shows that the principal components analysis for the factor loadings found five components with Eigenvalues greater than 1 as the scree plot clearly illustrates in Figure 1. According to the Kaiser Criterion, eigenvalues are helpful for choosing a factor. Therefore, the study explained 35.936%, 7.96%, 5.15%, 3.43%, and 2.93% of the variance, the most often used measure of dispersion, along with the standard deviation. These five components were chosen to be kept for more analysis. The five-component solution explained 55.45% of the variation, with components 1 and 5 each accounting for 35.95%, 7.961%, 5.146%, 3.430%, and 2.934% of the variance, respectively.



**Fig. 1 - Scree plot for the practice teaching experiences of technology and vocational education pre-service teachers**

**Table 1 - Factor loadings in investigating the constructs of practice teaching experiences of technology and vocational education pre-service teachers**

	Costuming Self- Evaluation	Implementing Teaching Method	Battling with Adversities	Accepting Feedback	Observing Time Management
Q1. I am certain or confident in handling different areas of teaching level.	0.752				
Q2. I am knowledgeable enough to overcome my lack of confidence.	0.726				
Q15. I am eager to gain more experience to reach my level of expertise in teaching.	0.689				
Q4. I am confident enough to teach my field of expertise.	0.614				
Q40. I engage myself in evaluating to execute my teaching in the future better.	0.607				
Q45. It satisfies me the most when I acquire and improve new sets of skills.	0.600				
Q39. Upon evaluation, I was able to assess what I need to enhance.	0.598				
Q7. It lessens my stress seeing myself wearing the academic dress (toga).	0.581				
Q3. I am determined to deliver my lessons even though I'm in trouble.	0.579				
Q22. I learned something new as I've undergone my On Job Training during my pre-service teaching	0.526				
Q36. I conceived that learning is a lifelong process to obtain my level of expertise.		0.624			
Q32. I've implemented strategies so that I can manage the whole duration of my class.		0.641			
Q34. I always conduct oral recitation and raised questions to assess my student learning process.		0.590			
Q37. I call my students' names randomly for them to participate and boost their engagement with my lesson.		0.572			
Q27. I tried my best to administer my lesson planning.		0.534			
Q31. The strategies that I implemented during my demo teaching are very helpful.		0.571			
Q35. I always make my PPT's look presentable to catch my student's attention for they to be more interactive		0.524			
Q42. I am prepared since I fulfill my duties as a pre-service teacher.		0.508			
Q8. I need help interacting with my critique teacher.			0.800		
Q9. I need help socializing with other professionals in my cooperating school.			0.784		
Q23. I need help dealing with my students due to the new learning phase.			0.736		
Q24. I need help in administering my lesson plan straight to the classroom setup.			0.715		
Q43. I experience difficulties in the new set-up of learning before I accomplished my practice teaching course.			0.589		
Q46. I gain respect from my learners and critique teacher after the On-the-Job training as a pre-service teacher.				0.571	
Q13. My critique teacher guided me to implement my delivery of lessons in my class very well.				0.518	
Q12. I received positive comments and feedback during my practice teaching.				0.508	
Q26. I feel overwhelmed whenever I receive positive comments from my CTs.				0.504	
Q38. I checked and evaluated my On Job Training performance as a pre-service teacher in the duration given to me.					0.635
Q29. I complied with all the requirements that are given to me.					0.528
Q18. I prioritize my On Job Training as Pre-service Teacher over personal matter unless in an unexpected crisis.					0.523

Note. Applied rotation method is Varimax.  
 Kaiser-Meyer-Olkin Measure of Sampling Adequacy .888  
 Bartlett's Test of Sphericity .000  
 Cronbach's Alpha .928

To extract the factor loading, the study also used the varimax rotation approach. At one level of factor analysis, the link between components is attempted to be clarified using the statistical approach known as varimax rotation. The result indicates that variables with scores of 0.5 or above are kept, while variables with values of 0.5 or lower are ignored. The

31 statements were kept. Factor 1 has 10 retained statements, whereas Factor 2 contains 9 retained statements. Factor 3 contains 5 retained statements. Factor 4 contains 4 retained statements and Factor 5 contains 3 retained statements. The five variables were examined to find common claims to create a theme. The topic factor loadings for self-evaluation, applying instructional methods, overcoming obstacles, receiving criticism, and practicing time management are shown in Table 2. Additionally, the component correlation matrix of the findings demonstrates how all five components are associated.

### 1.3. Measure of Constructs of the Experiences of Preservice Teachers During the Practice Teaching Program

Table 2 shows the measures of the constructs of preservice teachers’ experiences during the practice teaching program. The overall mean is 4.3285 with a standard deviation of 0.35033, which means that the practice teaching experiences are always observed. Further, the result showed that among the factors, accepting feedback had the greatest weighted mean of 4.6859 with a standard deviation of 0.43492, meaning it is always observed. This is followed by implementing the teaching method with a weighted mean of 4.6044 with a standard deviation of .44093, which means that it was always observed. Time management was consistently observed, as evidenced by its weighted mean of 4.5943 and standard deviation of 0.46657. Self-evaluation has an overall observation rate of 100%, with a weighted mean of 4.4816 and a standard deviation of 0.39507. Costuming Self-Evaluation had a weighted mean of 4.4816 and a standard deviation of .39507, which indicates that it was consistently observed. Lastly, battling with adversities has the lowest mean of 3.2763 and a standard deviation of 0.94762 which means it is sometimes observed.

**Table 2 - Measure of constructs of preservice teachers’ experiences during the practice teaching program**

	Mean	Std. Deviation	Descriptive Equivalent
Costuming Self-evaluation	4.4816	.39507	Always Observed
Implementing Teaching method	4.6044	.44093	Always Observed
Battling Adversities	3.2763	.94762	Sometimes Observed
Accepting Feedback	4.6859	.43492	Always Observed
Observing Time management	4.5943	.46657	Always Observed
<b>Overall</b>	<b>4.3285</b>	<b>.35033</b>	<b>Always Observed</b>

## 4. Discussions

### 4.1. The Constructs of the Experiences of Respondents

The study used exploratory factor analysis to determine the constructs of practice teaching experiences of technology livelihood and vocational education pre-service teachers. Based on the data gathered from 46 survey questionnaire items, the results of BTLED and BTVTLED pre-service teachers from Davao del Norte State College (DNSC), Santo Tomas College of Agriculture, Sciences, and Technology (STCAST), and the University of Southeastern Philippines Tagum-Mabini Campus (USEP-Tagum) indicated that the Kaiser-Mayer-Okin value was .888. Kaiser (1970, 1974) stated that a value of >.9 was excellent, and a value of .5 was unsatisfactory. Moreover, Hair et al. (2006) advised accepting a number greater than 0.5. Values between 0.5 and 0.7 are considered acceptable, whereas values between 0.7 and 0.8 are deemed good, as explained by Brenton (2016). Peter Samuels (2017) also asserts that when the Kaiser-Mayer-Okin value exceeds the advised value of 0.6, the adequacy and average value are deemed acceptable.

The study also found that Bartlett's Test of Sphericity supported the correlation matrix's factorability, which had a value of .000 and approached statistical significance. According to the null hypothesis, the correlation matrix is an identity matrix, which is tested using Bartlett's test of sphericity (Meseguer-Artola et al., 2016). Taherdoost, Sahibuddin, and Jalaliyoon (2020) asserts that it should be significant (less than .05), p 0.001, demonstrating that the correlation matrix differs considerably from an identity matrix, in which correlations between variables are all zero.

A 0.000 (less than 0.01) score on Bartlett's Test of Sphericity denotes high relevance. A Bartlett Test of Sphericity may be used in SPSS to gauge the relationship's strength. It is a measurement of a collection of distributions' multivariate normality. This test likewise tests the original correlation matrix's identification as an identity matrix. According to the significant value of less than 0.05, these data do not produce an identity matrix and are, therefore, approximately multivariate normal and suitable for further analysis.

Five components with eigenvalues greater than 1 were also found using Principal Component Analysis. Santos et al. (2019), who made this claim, hypothesized that when the eigenvalues are bigger than 1, the variance explained by adding the component or factor will grow to a greater extent the more apart the points are from one another. And that makes clear the study's finding, which accounts for the variances of 35.936%, 7.96%, 5.15%, 3.43%, and 2.93%, respectively. The five-component solution explained 55.45% of the variation, with components 1 and 5 each accounting for 35.95%, 7.961%, 5.146%, 3.430%, and 2.934% of the variance, respectively.

Through thematic analysis, the following are the constructs: costuming self-evaluation, implementing teaching methods, observing time management, accepting feedback, and battling with adversities. In the study conducted by Somosot (2020), the results are relatively the same; pre-service teachers' experiences have the following factors: Collaboration skills, communication skills, creativity skills, and lesson planning were relatively the same in the general meaning of teaching methods. Also, self-directed skills and teachers' personalities were relatively the same in the general meaning of costuming self-evaluation. The results of this study also support the notion that pre-service teachers were prepared to work as practice instructors in various secondary institutions. According to the survey, pre-service teachers were also extremely prepared regarding classroom management and personality.

However, the study by Tumbali (2021) produced themes and sub-themes that painted a picture of pre-service teachers' behavioural intentions toward becoming TLE instructors. Ajzen (2019) defines attitude toward becoming a TLE teacher as believing in the expected outcomes of the conduct. Positivity influences the intention to engage in the action. Based on their answers to the question, the participants' attitudes toward becoming TLE instructors were characterised in this study.

The second theme, Perceived Subjective Norm towards Becoming a TLE Teacher, explores how TLE was exposed to the world of technology and livelihood. Most participants were from families that made their living through farming, fishing, the food industry, or teaching TLE at junior high schools. Families of participants also understood that TLE instructors were in demand for K–12 curricula and that the information and skills acquired could be applied even if they chose not to pursue teaching as a career after graduation. According to Alnaqbi (2016), encouragement from peers, instructors, and family members is crucial for cultivating the desire to enrol in vocational and technical programs. They influence the students' perceptions of TVET careers. It should be emphasised that peer pressure may contribute to developing the desire to become a TLE instructor. However, professors are also considered while determining what profession to choose after graduation. Qualified TLE teachers fulfilling their obligations may help promote a favourable attitude toward the profession. Competent TLE instructors convey the advantages of becoming TLE teachers by serving as role models.

This boosts young people's confidence that the profession is a suitable choice for a career (Omar, Zahar, & Rashid, 2020). Perceived behavioural control toward becoming a TLE instructor was developed as the third topic of this study. Perceived behavioural control refers to perceptions about the existence of elements that may support the performance of the activity. Additionally, pre-service teachers acknowledged that they were well-prepared for the teaching profession and had personalities conducive to teaching (Holly & Vetter, 2017).

Based on the data gathered by the researchers, the result revealed that the measure of constructs of pre-service teachers' experiences during the practice teaching program was indicated by the following: Implementing teaching methods with a weighted mean of 4.6044, which means that it was always observed. Observing Time management with a weighted mean of 4.5943 means that it was always observed. Costuming Self-Evaluation with a weighted mean of 4.4816 means it was always observed. Lastly, battling with adversities has a weighted mean of 3.2763, which means that it is sometimes observed. The themed factor loadings, specifically costuming self-evaluation, implementing teaching methods, battling with adversities, accepting feedback, and observing time management, are defined with an overall weighted mean score of 4.3285, which means that it was always observed.

## 4.2. Costuming Self-Evaluation

The study results revealed that the first construct of the practice teaching experiences is the Costuming Self-Evaluation. According to the University College of London (2019), evaluating one's teaching is looking back on one's teaching to evaluate how well it has gone and how one may improve it. Self-evaluation is vital to understand if teaching is effective so that it can be enhanced in the future. Strategy or technique of instruction may be enhanced via ongoing evaluation.

In the Costuming Self-Evaluation, the study revealed the following statements: Q1. "I am certain or confident in handling different areas of teaching level." According to Mary Dowd (2022), teaching is a skill that must be learned and practised. List personal characteristics, skills, and abilities that contribute to your success as a teacher. Q2. "I am knowledgeable enough to overcome my lack of confidence." Q15. "I am eager to learn more experience to reach my level of expertise in teaching." Q4. "I am confident enough to teach my field of expertise." Q40. "I engage myself in evaluating to execute my future teaching better." According to Pendergast et al. (2017), engaging oneself includes self-efficacy beliefs, identity building, and the influence of educational programs on the growth of these qualities in starting pre-service teachers entering teacher training. Q45. "It satisfies me the most when I acquire and improve new skills." Mary Dowd (2022) lists personal qualities, abilities, and skills that support your success as a teacher. Teaching is a skill that must be learned and honed. Q39. "Upon evaluating, I was able to assess what I need to enhance," which is the process of pre-service teachers learning to teach as they mature and providing useful recommendations on improving teacher identity development (Irani et al., 2020). Q7. "It lessens my stress seeing myself wearing the academic dress (toga)." Q3. "I am determined to deliver my lessons even though I'm in trouble." Q22. "I learned something new while undergoing my on-the-job training during my pre-service teaching." Dinçer (2018) proposed that pre-service teachers' relationships to these categories are flexible and may change from topic to topic due to specific experiences in their development as pre-service teachers.

### 4.3. Implementing Teaching Method

The study's results also revealed that the second construct of the practice teaching experiences is the Teaching Methods. According to Leovigildo et al. (2021), different strategies, trends, methods, and techniques of teaching in the new normal learning perspective of students focus on the various domains of learning as regards psychomotor, affective, and cognitive skills in the research strategies, Trends, Methods, and Techniques of Teaching in the New Normal Learning Perspective of Students.

In Implementing Teaching Methods, the study revealed the following statements: Q16. "I conceived that learning is a lifelong process to obtain my level of expertise." Lifelong learning is gaining knowledge and new skills throughout life to grow one's career. Lifelong learning can do wonders for professional life and personal development (CFI, 2018). Q32. "I've implemented strategies to manage the whole duration of my class." According to Mufidah (2019), pre-service teachers must know about classroom management, classroom activities, teaching approaches, and other topics to improve their teaching abilities. Q34. "I always conduct oral recitation and raise questions to assess my student learning process." Q37. "I call my students' names randomly for them to participate and boost their engagement with my lesson." Q31. "The strategies I implemented during my demo teaching are beneficial." Q35. "I always make my PPTs look presentable to catch my students' attention so they are more interactive." Strategies, trends, methods, and techniques focus on the various learning domains of psychomotor, affective, and cognitive learning (Leovigildo et al., 2021). Q42. "I am prepared since I fulfil my duties as a pre-service teacher." Q27. "I tried my best in administering my lesson planning". Ebersole (2019) asserted that "knowing what drives pre-service teachers to begin integrating standards-based technology into their lesson planning would benefit educators in deciding the optimal strategy to deliver this knowledge throughout teacher preparation programs.

### 4.4. Battling with Adversities

The results also revealed that Adversities is the third construct of the practice teaching experiences. According to Kelly et al. (2018), challenges encompass extreme adversity and recurring daily incidents. In research by Moussaid & Zerhouni (2017), pre-service instructors also ran across several issues. The Adversities study revealed the following statements: Q8. "I have difficulties in interacting with my critique teacher." Q9. "I have difficulties socialising with other professionals in my cooperating school." Q23. "I have difficulties dealing with my students due to new phase of learning," which was reinforced by Howard et al. (2020). The research was done on the perceptions of institutional support and teacher self-efficacy beliefs related to online training, which are important for teaching in a pandemic. Q24. "I have difficulties in administering my lesson plan straight to a classroom set-up." According to Lewis (2015), "understanding what motivates pre-service teachers to start integrating standards-based technology into their lesson planning will aid teacher educators in deciding how best to convey this information during teacher preparation programs, discussed in the study of Ebersole (2019). Q43. "I experienced difficulties in the new set-up of learning before I accomplished my practice teaching course," which is affirmed by the study by Napanoy et al. (2021); the results show that the seven areas of support—administrative assistance, cooperating teachers, student supervisors, peers, students, associated tasks, and learning environment—where pre-service teachers may have some minor issues.

Additionally, according to Flores et al. (2020), different categories of understanding failure revealed that pre-service teachers interpret failure from the perspectives of both teachers and learners. This suggests that both perspectives are intricately linked to developing a teacher's identity, so it is challenging to think about one without the other. Reflections on teaching practice by student teachers, emphasising difficulties they faced and how they handled them in a reflective manner Dzimiri (2019).

### 4.5. Accepting Feedback

The result of the study revealed that the fourth construct of the practice teaching experience is Accepting Feedback. The feedback received during the practice teaching program significantly impacts the preservice teachers, specifically in their knowledge and pedagogy (Omilani & Ogbonna, 2023). Kaka (2019) asserts that it is critical to comprehend the function of feedback in the partnership between cooperating teachers and in-service teachers. Giving comments on the preservice teacher's performance to the institution and the preservice teacher is one of the cooperating teacher's most important duties. In the Feedback, the study revealed the following statements: Q46. "I gained respect from my learners and critique teacher after the on-the-job training as a preservice teacher." Q13. "My critique teacher guided me to implement my delivery of lessons in my class very well." Q12.

"I received positive comments and feedback during my practice teaching." According to the study of Abdullah et al. (2020), pre-service teachers may keep track of their learning and develop their teaching using the cooperating teacher's high-quality feedback. Their findings also indicate that pre-service teachers required positive and constructive criticism. Q26. "I feel overwhelmed every time I receive positive comments from my CTs." Furthermore, according to Kaka (2019), many things have become evident via discussions with seasoned instructors who are now monitoring and giving feedback to their preservice teachers. Without these connections, preservice educators would be unable to interact with their students or give them feedback, and they might find it more challenging to influence their students positively.



#### 4.6. Observing Time Management

The study revealed the last and fifth construct of the practice teaching experiences: Observing Time Management. Time management juggles various demands of study, social life, employment, family, and personal interests and commitments with the finiteness of time. Using time management techniques, teachers can increase their productivity and give their students a better education (Lualhati, 2019). In Observing Time Management, the study revealed the following statements: Q38. "I managed to check and evaluate my On Job Training performance as a pre-service teacher in time duration given to me," Q29. "I complied with all the requirements that were given to me." Q18. "I prioritise my on-the-job training as a pre-service teacher over personal matters unless in an unexpected crisis." The following statements differ from the result of the study conducted by Suyatno et al. (2023), in which they reported that preservice teachers have a problem with time management, specifically with the learning schedule of the university and their schedule for the assignment. The result of the study shows that despite the different tasks given to the preservice teachers, it is important to observe time management. Observing time management practices may result in high satisfaction and academic performance (Bargmann & Kauffeld, 2023).

### 5. Conclusions

Based on the respondents' demographic profiles, most respondents came from the age bracket of 21–22, the age norm for senior college students. Meanwhile, the study was female-dominated. Most of the respondents have taken BTLEd and BTVTED courses with specific majors. While most respondents are BTLEd Pre-service Teachers majoring in Home Economics, the fewest are from BTVTED studies majoring in Agriculture Crop Production, Agriculture Animal Production, and Food and Service Management.

The findings of the study concluded that five constructs were crafted based on the survey results using exploratory factor analysis. The themed constructs are costuming self-evaluation, implementing teaching methods, overcoming adversity, accepting feedback, and observing time management. The study revealed the measure of this construct based on the experiences of preservice teachers during the practice teaching program, starting with accepting feedback with the highest mean of 4.6859, followed by implementing teaching methods with a mean of 4.6044, Self-Evaluation with a standard of 4.4816, and least is Battling with Adversities with the mean of 3.2763. Accepting feedback has a mean of 4.6859, followed by Implementing Teaching Methods with a standard of 4.6044, and the least with the overall mean of 3.2763, which is battling with adversities.

Since the study was anchored on the situated learning theory, it shows how learning occurs and develops when people can engage in a community of practice. As they have more opportunities to practice within the learning framework, new learners in such a community eventually achieve the level of an expert. The pre-service teachers received compliments and critiques that helped them analyse and start their performance in the field since taking feedback had the greatest outcome among the five themes.

Moreover, the self-efficacy theory explains that perceived self-efficacy relates to beliefs in one's skills to plan and carry out the courses of action necessary to manage potential scenarios. Efficacy beliefs affect how individuals feel, think, behave, and motivate themselves. Contrarily, overcoming obstacles earned the lowest score of five, indicating that this obstacle represents pre-service teachers' difficulties during the teacher education program. The pre-service teachers are developing their competence and confidence in their capacity to become experts in both pedagogy and subject.

### 6. Recommendations

The College/Universities may focus on the following factors that are correlated to each other: Costuming Self-Evaluation, Implementing Teaching Methods, battling with Adversities, Accepting Feedback, and Observing Time Management, which can be viewed as a basis for further improvement and betterment of the future educators.

A teacher Education Program that helps pre-service teachers overcome difficulties in their teaching, reflect, and solve problems might better prepare them to adjust to in-service teaching. The program must find a solution to the issue because the results indicated that overcoming adversity had the lowest mean, at 3.2763.

Furthermore, this study can be a basis for future researchers conducting studies about or related to practice teaching experiences to support assumptions of possible factors. It is also suggested to use the survey questionnaire to a larger number of samples since the number of samples used in this research is only 153 respondents. Moreover, the Exploratory Factor Analysis (EFA) revealed the five components: Costuming Self-evaluation, Implementing Teaching Methods, battling with adversities, Accepting Feedback, and Observing Time Management, with the overall measure of constructs obtaining a mean score of 4.3285. The researchers recommend that future researchers may investigate further using the data gathered employing other methods and designs such as Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM).

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## References

- Abas, M.C. (2016). Difficulties in field-based observation among preservice teachers: Implications to practice teaching. *International Journal of Evaluation and Research in Education*, 5(2), 101-112. Retrieved from: <https://files.eric.ed.gov/fulltext/EJ1108531.pdf>
- Alnaqbi, S.A. (2016). Attitudes towards vocational education training in the context of United Arab Emirates: A proposed framework. *International Journal of Business and Management*, 11(1), 31-38. Doi: 10.5539/ijbm.v11n1p31
- Bandura, A. (Ed.). (1995). Self-efficacy in changing societies. Cambridge University Press. <https://doi.org/10.1017/CBO9780511527692>
- Bargmann, C. & Kauffeld, S. (2023). The interplay of time management and academic self-efficacy and their influence on pre-service teachers' commitment in the first year in higher education. *Higher Education*. Doi: <https://doi.org/10.1007/s10734-022-00983-w>
- Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Frontiers in Psychology*, 10. doi.org/10.3389/fpsyg.2019.01645
- Booth, P., Guinmard, I., & Lloyd, E. (2017). The perceptions of a situated learning experience mediated by novice teachers' autonomy. *EUROCALL Review*, 25(1), 76-91. Doi: <https://doi.org/10.4995/eurocall.2017.7081>
- Dowd, M. (2022, March 21). *How to be a confident teacher*. Work. Retrieved July 3, 2022, from <https://work.chron.com/confident-teacher-1707.html>
- Dzimiri (2019). Undergraduate student teachers' reflections on their teaching practice experience: Challenges encountered and Responsive Solutions employed. *J. of Education and Practice*. <https://doi.org/10.7176/jep/10-17-08>
- Ebersole, L. (2019). Preservice teacher experience with technology integration: How the preservice teacher's efficacy in technology integration is impacted by the context of the preservice teacher education program. *International Dialogues on Education Journal*, 6(2). doi.org/10.53308/ide.v6i2.64
- Ertmer, P. A. (2005). Teacher Pedagogical Beliefs: The Final Frontier in Our Quest for Technology Integration? *Educational Technology Research and Development*, 53(4), 25–40. Doi: <https://doi.org/10.1007/BF02504683>
- Hallman, H. L., and Rodriguez, T. L. (2015). "Fostering community-based field experiences in teacher education," in *Rethinking Field Experiences in Preservice Teacher Preparation: Meeting New Challenges for Accountability*, ed E. R. Hollins (New York, NY: Routledge), 99–116. doi: 10.4324/9781315795065
- Hamilton E.R., & Duinen, D.B.V.V. (2019). Purposeful reflections: Scaffolding preservice teachers' field placement observations. *The Teacher Education*, 53(4), 367-383. Doi: <https://doi.org/10.1080/08878730.2018.1425787>
- Hungerford-Kresser, H. and Vetter, A. (2017), Political tensions: English teaching, standards, and postsecondary readiness, *English Teaching: Practice & Critique*, 16 (3), 407-422. Doi: <https://doi.org/10.1108/ETPC-05-2017-0061>
- Irani, F.H., Chalak, A., & Tabirizi, H.H. (2020). Assessing pre-service teachers' professional identity construction in a three-phase teacher education program in Iran. *Asian Pacific Journal of Second and Foreign Language Education*, 5 (19), doi: <https://doi.org/10.1186/s40862-020-00100-3>
- Kaka, S. J. (2019). Cooperating Teachers' Perceptions of their Preservice Teacher's Impact on Student Learning. *Educational Research: Theory and Practice*, 30(2), 75- Retrieved July 3, 2022, from <https://files.eric.ed.gov/fulltext/EJ1248410.pdf>
- Kelly, N., Sim, C., & Ireland, M. (2018). Slipping through the cracks: Teachers who miss out on early career support. *Asia-Pacific Journal of Teacher Education*, 46, 1–25. <https://doi.org/10.1080/1359866X.2018.1441366>
- Lani, J., Melisa, M., Glase, J., Dsouza, J., Celia, Vannesa, Tom, David. (2022). Cronbach's Alpha. Complete Dissertation. <https://www.statisticssolutions.com/cronbachs-alpha/>
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge University Press. <https://doi.org/10.1017/CBO9780511815355>
- Leovigildo Lito D. Mallillin et al (2021). Strategies, Trends, Methods and Techniques of Teaching in the New Normal Learning Perspective of Students. *East African Scholars J Edu Humanity Lit*, 4(7), 265-274.. doi.org/10.36349/easjehl.2021.v04i07.001

- Lualhati, G. P. (2019). Time management practices of educators in a State University. *PUPIL: International Journal of Teaching, Education and Learning*, 3(1), 281–289. doi.org/10.20319/pjtel.2019.31.281289
- Meseguer-Artola, A., Aibar, E., Lladós, J., Minguillon, J., & Lerga, M. (2016). Factors that influence the teaching use of Wikipedia in higher education. *Journal of the Association for Information Science and Technology*, 67(5), 1224-1232. Doi: <https://doi.org/10.1002/asi.23488>
- Mohamad, M.M., Dmin, T.B., Sulaiman, J., Affandi, M., Raja, M.A. (2023). Development and validation of Heutagogical Survey items. *Journal of Technical Education and Training*, 15 (93), 55-66. Doi: <https://doi.org/10.30880/jtet.2023.15.03.006>
- Moussaid, R., & Zerhouni, B. (2017). Problems of pre-service teachers during the practicum: An analysis of written reflections and mentor feedback. *Arab World English Journal*, 8(3), 135–153. <https://doi.org/10.24093/awej/vol8no3.10>
- Mufidah, N. (2019). The Development of Pre-Service Teachers' Teaching Performance in the Teaching Practice Program at English Department of State Islamic University of Antasari Banjarmasin. *Dinamika Ilmu*, 19(1), 97-114. <https://doi.org/10.21093/di.v19i1.1469>
- Napanoy, J. B., Gayagay, G. C., & Tuazon, J. R. (2021). Difficulties encountered by pre-service teachers: Basis of a pre-service training program. *Universal Journal of Educational Research*, 9(2), 342–349. doi.org/10.13189/ujer.2021.090210
- Omar, M.K., Zahar, F.N., & Rashid, A.M. (2020). Knowledge, skills, and attitudes as predictors in determining teachers' competency in Malaysian TVET institutions. *Universal Journal of Educational Research*, 8(3C), 95-94. Doi: 10.13189/ujer.2020.081612
- Omilani, N.A. & Ogbonna, S.N. (2023). Analysis of supervisor's written feedback addressing pre-service science teacher's pedagogical content knowledge during teaching practice. *EURASIA Journal of Mathematics, Science and technology Education*, 19 (9), 2-15. Doi: <https://doi.org/10.29333/ejmste/13525>
- Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. McGraw-hill education (UK).
- Pendergast, D., Garvis, S., & Keogh, J. (2017). Pre-service student-teacher self-efficacy beliefs: An insight into the making of teachers. *Australian Journal of Teacher Education*, 36(12). Doi: <https://doi.org/10.14221/ajte.2011v36n12.6>
- Peter Samuels (June 2016). *Advice on Exploratory Factor Analysis*. Retrieved from: [https://www.researchgate.net/publication/304490328\\_Advice\\_on\\_Exploratory\\_Factor\\_Analysis](https://www.researchgate.net/publication/304490328_Advice_on_Exploratory_Factor_Analysis)
- Rubrico, D.F., & Rubrico, D.N. (2020). Self-appraisal readiness evaluation of BSED and BEED preservice teacher and instructional competencies. *Global Journal of Human-Social Science*, 20(G13), 9–30. Retrieved from <https://socialscienceresearch.org/index.php/GJHSS/article/view/3482>
- Somosot, I.S. (2020). 21<sup>st</sup> century skills and the readiness of preservice teachers toward practice teaching program. *Asia Pacific Journal of Multidisciplinary Research*, 8(2), 36-42. Retrieved from: <http://www.apjmr.com/wp-content/uploads/2020/04/APJMR-2020.8.2.05.pdf>.
- Suyatno, S., Wantini, W., Pambudi, D.I., Muqowin, M., Tinus, A. & Patimah, L. (2023). Developing pre-service teachers' professionalism by sharing and receiving experiences in the Kampus Mengajar Program. *Educational Sciences*, 13 (2), 143. Doi: <https://doi.org/10.3390/educsci13020143>
- Taherdoost, H., Sahibuddin, S., & Jalaliyoon, N. (2020). Exploratory factor analysis: Concepts and theory. *Advance in Applied and Pure Mathematics*, 27, WSEAS, 375-382. Retrieved from: <https://hal.science/hal-02557344>
- Tantoy, O. A., & Gemota Jr., M. C. (2018). Teaching skills of pre-service teachers: Basis for mentoring initiatives. *Liceo Journal of Higher Education Research*, 13(2). <https://doi.org/10.7828/ljher.v13i2.1057>
- Tasdemir, M.Z., Iqbal, M.F., & Asghar, M.Z. (2020). A study of the significant factors affecting pre-service teacher education in Turkey. *Bulletin of Education and Research*, 42(1), 79-100. Retrieved from: <https://files.eric.ed.gov/fulltext/EJ1258047.pdf>
- Tumbali, A. J. Y. (2021). On becoming Technology and Livelihood Education teachers. *International Multidisciplinary Research Journal*, 3(2), 260–268. <https://doi.org/10.54476/iimrj308>
- University College of London. (2019, November 6). *Evaluating your teaching*. Teaching & Learning. Retrieved July 3, 2022, from <https://www.ucl.ac.uk/teaching-learning/publications/2019/aug/evaluating-your-teaching>
- Wilson, M.L. (2021). The impact of technology integration courses on preservice teacher attitudes and beliefs: A meta-analysis of teacher education research from 2007-2017. *Journal of Research on Technology in Education*, 55(2), 252-280. Doi: <https://doi.org/10.1080/15391523.2021.1950085>