

A Training Model for Beginning Home Economics Senior High School Teachers

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DOI: <https://doi.org/10.47772/IJRISS.2026.100700568>

Received: 22 July 2026; Accepted: 27 July 2026; Published: 07 August 2026

INTRODUCTION

The Philippine educational system has been constantly reviewed to meet the global standards. The recent system review led to the enactment of Republic Act No. 10533, also known as “Enhanced Basic Education Act of 2013” or the K to 12 Program, which aims for quality education among Filipino graduates to be at par with the global standards. The objective of the K to 12 Program is to develop learners to be knowledgeable, skillful, self-sustainable, holistic, and prepared for higher level of education or a job once they have finished the Senior High School (SHS), which is the final key stage of the program (Republic of the Philippines, 2013).

One of the new features of the K to 12 Program is the inclusion of the SHS component in the basic education that requires two additional years for the students to study a particular strand based on their interests and abilities. Technical-Vocational-Livelihood (TVL) is one of the four tracks in the SHS Curriculum of the K to 12 Program. The other three tracks are on Sports; Arts and Design; and Academics. The TVL track has four strands: a) Agriculture; b) Home Economics (HE); c) Industrial Arts; and d) Information, Communication and Technology (ICT). Among the four TVL tracks, HE is found to be the most preferred strand of SHS students because it offers the biggest number of specialization areas (Caballero & Cabahug, 2015). HE includes content areas in Cosmetology (Hairdressing, Barbering, and Nail Care); Dressmaking and Tailoring (Fashion Designing Apparel); Caregiving (Wellness Massage); Food and Beverage Services (Cookery, Commercial Cooking, and Bartending); Baking; Tour Guiding; and Related Handicrafts (Fashion Accessories, Needle, Macrame, Wood, and Leather Craft). Real-life learning experiences are encapsulated in SHS. This means that SHS students must complete a work immersion program prior to graduation as part of their learning experiences. After graduation, they must be able to find employment or be an entrepreneur if not to continue their tertiary education.

One measure then of the effectiveness of the SHS Program is the employability of graduates. According to Cheng et al. (2022), employability of graduates is the key concept in Higher Education. Moreover, the employment rate of graduates serves as a basis in determining the quality of education provided by the University. However, according to the Philippine Chamber of Commerce and Industry's Human Resources Development Foundation Inc. (PCCI HRDF) as cited in Yee (2018), employers could not hire SHS graduates applying for work in the industry because there is a gap between the skills that they have learned from the school and what the industry requires. To bridge the supply-and-demand gap in various industries for economic transformation, developing countries in the world emphasized the value of producing highly-technical skilled human resources (Rajadurai et al., 2018). Thus, the need to advance HE teacher training to produce knowledgeable and skillful SHS-TVL track learners is evident. This means that the institutions offering Technical-Vocational Education and Training (TVET) must ensure that their teachers are fully equipped with the required competencies and meet global standards of quality.

Several memoranda have been released emphasizing the expectations for teachers who are in the teaching workforce. The Department of Education (DepEd) Memorandum Order No.42 Series of 2017 states that

Filipino teachers are expected to be change agents of the country's economy. Hence, as stipulated in the Philippine Professional Standards for Teachers (PPST), there is a set of quality standards expected of a professional teacher (DepEd, 2017). These standards are clustered into seven domains with increasing levels of competencies defined by four career stages, which teachers could become as they engage in the teaching profession and practice. Career Stage 1 or the Beginning Teacher Stage is the target of TEIs offering the Bachelor of Technical Vocational Teacher Education (BTVTED), a teacher development program defined in the Commission on Higher Education (CHED) Memorandum Order (CMO) No.79 series of 2017. This CMO specifies the need to develop competitive Technology and Livelihood Education (TLE) educators equipped with the necessary competencies to deliver the SHS-TVL track that can prepare industry-ready SHS graduates.

However, teachers who teach SHS-TVL track students are mandated not only to have a teaching license but to also have a National Certification (NC) in any area of HE, ICT, Agricultural Technology, and Industrial Arts (CHED, 2017). CHED further mandates that TVL-HE teachers must have also completed a Trainers' Methodology Assessment, earned some academic units in a master's degree in education, handled general education with specialization in HE area, or had at least one year of very satisfactory rating in their first-year of teaching TVL-HE subjects at the tertiary level. This explains why beginning HE teachers must also meet the standard competency, knowledge, and skills that TESDA requires for NC Assessment.

Among the government education agencies, it is TESDA that is tasked to manage and supervise technical and skills development in the Philippines. TESDA approves skills standards and assessments. It is also the agency responsible for developing an accreditation system for institutions involved in the middle-level manpower development. It funds programs and projects for technical education and skills development and assists trainers in their training programs. TESDA's vision is to transform education leaders and to help develop skills among the Filipino workforce (Syjuco, 2012). Its mission is to set direction, promulgate relevant standards, and implement programs geared towards a quality-assured and inclusive technical education, skills development, and certification system. Part of TESDA's function is to provide training for teachers who handle and teach technical skills to SHS-TVL students. According to Caballero and Cabahug (2015) after the training given to teachers, assessment follows and the calibration of the required skills is done. This assessment is also done to Grade 12 SHS-TVL track finishers under the instruction and training given by their qualified TVL teachers or mentors. Given the complexity of requirements needed from teachers teaching the SHS TVL-HE track as set by DepEd, CHED, TESDA, and even by the industry, only a few beginning teachers meet the qualifications required of them to produce employable SHS graduates. There is also a limited number of teachers specializing in HE. Hence, during the full implementation of the SHS Program in the Philippines in School Year 2016-2017, there were teachers hired including those coming from the industry who were obliged to also teach HE area strands even if they were not equipped with the necessary competencies in these strands (Acosta & Acosta, 2015).

Cognizant of the demand for quality teachers teaching the TVL-HE strand, it is imperative to make interventions to identify TVL-HE basic and life skills to address the need for quality beginning HE teachers. This led the researchers to propose a teacher training model specifically for the beginning SHS TVL-HE teachers to meet the demands and requirements for them to produce SHS students who could find a job in the industry after graduation. There is a need for a training program for beginning teachers that is aligned with the K to 12 competencies, TESDA competencies, PPST, and industry needs to ensure that the education that they provide to SHS graduates makes them holistic, self-sustaining, empowered, and industry-ready. The said training for teachers is imperative as this is an area needing reform according to Billetoft (2011).

CONCEPTUAL FRAMEWORK

A training model cannot just be copied but should be contextualized depending on needs (Basu & Majumdar, 2009). Thus, this study commits to develop that training model that could address the education gaps and produce quality HE teachers in the SHSs that the Philippines needs.

This study was then conceived to explore how the beginning SHS-TVL-HE teachers could be equipped with extensive technical knowledge and skills from the experts in the industry and experienced teachers from the

TEIs guided both by the Experiential and Constructivist Learning Theories. Quality and effective teaching should be assured to effectively transfer the knowledge, skills, and attitudes of SHS TVL-HE beginning teachers to their SHS TVL-HE students. The proposed training model aims to produce industry-ready beginning SHS TVL-HE teachers and industry-ready and self-sustaining SHS graduates.

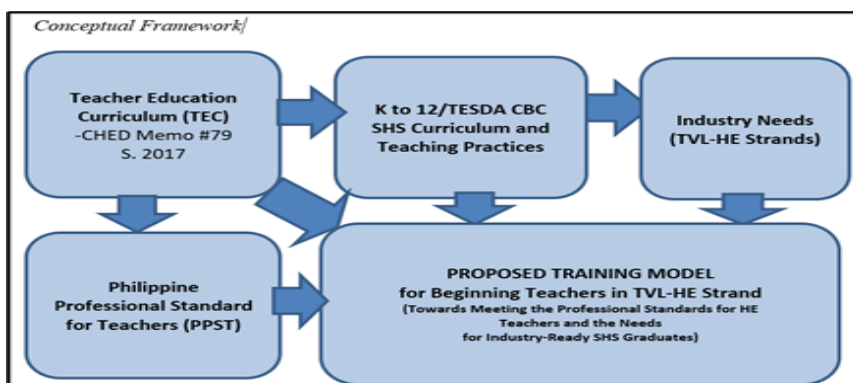


Figure 1

Figure 1 shows the graphical image of the assumed process in designing a training model that could produce SHS-HE beginning teachers who possess the competencies required by the K to 12 Program and industry.

As shown in Figure 1, the researcher aimed to design a training model that is useful for both in-service teachers who are handling SHS-TVL-HE subjects and their students. The training model in developing beginning teachers in SHS-TVL-HE took into consideration the required competencies from various standards/demands to include Teacher Education Curriculum, K to12 SHS CG, TESDA-CBC, PPST, and industry needs as guides in developing SHS graduates that have been holistically developed, self-sustainable, empowered, and industry-ready.

Research Objectives

This study aimed to develop a model for training in-service beginning teachers in TVL Track Home Economics strands in the SHS Program to make them meet the needed qualifications of the K to 12 program and the industry needs. Specifically, it sought to:

1. Identify the demands and requirements for Senior High School Home Economics beginning teachers based on the:

1.1. K to 12 Curriculum,

1.2. TESDA Competency-Based Curriculum;

1.3. Industry Needs; and

1.4. Philippine Professional Standards for Teachers

2. Describe the teaching practices of beginning SHS HE teachers and their alignment with the demands of professional standards and industry needs; and

3. Design a training model for beginning TVL-HE teachers

METHODOLOGY

This study utilized a qualitative research method particularly the descriptive-developmental design.

Creswell (2007) explained that a study that is qualitative in nature gathers specific data that aims to assess the recent and varied conditions and situations. This research was also developmental because it aimed to develop a training model in the TVL strand, which Richey and Klein (2005) explained should be generated from conclusions and theories to solve specific teaching and learning problems. This study also validated theories and major educational practices.

This study also used an inquiry-analysis method where surveys, interviews, focus group discussions (FGD), and classroom observations were conducted in order to design a training model as a basis for framework of action. Document analysis was done on the K to 12 Curriculum Guide, TESDA-CBC, and some global competencies to find out the deficiencies among the competency standards that the SHS graduates need in the industry.

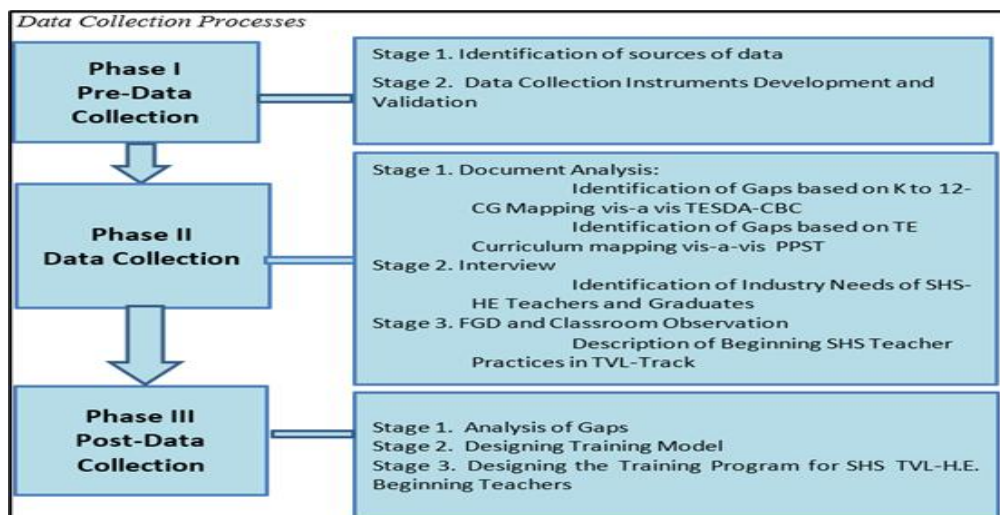
Selection Criteria and Participants

This study utilized purposive sampling in the selection of the participants of the study. The participants were chosen based on set criteria: 1) they should either be SHS beginning TVL-HE teachers with at least one to four years teaching experience in handling SHS classes; 2) Division office supervisor holding a position related to TLE; 3) principal of the participating SHS; 4) company owners; 5) industry managers; and 6) industry practitioners. These selection criteria ensured that the participants' responses would be aligned to the research purpose considering that the main goal of the study was to come up with an effective training model for beginning SHS-HE teachers.

The SHS TVL-HE beginning teachers and school administrators from seven (7) SHS offering TVL-HE strand subjects were chosen to ensure accurate data to best inform the design of the training model for beginning HE teachers. School administrators were included as contact persons for the verification of responses regarding the school environment and teaching-learning facilities. Industry sectors such as company or business owners, managers, and industry practitioners were also included to ensure that SHS beginning teachers would produce industry-ready graduates. Having participants from both TEIs and industry sectors allowed the researcher to bridge the gaps in the learning competencies taught and actual skills needed in the industry. The documented results of the needs assessment and the responses of the SHS TVL-HE beginning teacher participants on the challenges, problems encountered, and their recommendations influenced the design of the training model. A total of 36 SHS TVL-HE teacher participants handling SHS-HE classes for one to four years were involved. Only one (1) among the 36 teacher-participants was newly hired. Five (5) SHS administrators from the same participating SHSs were also involved. There were 11 industry practitioners, four (4) of which were industry owners, two (2) were managers, and five (5) were industry workers.

This study was accomplished through three (3) phases

Figure 2 shows the processes involved in data collection. As shown in Figure 2, there were three (3) phases in data collection: pre-data collection; data collection; and post-data collection.



Phase I: The Pre-Data Collection - refers to the preliminary activities that the researcher did before she proceeded to the data collection. This included the gathering of pertinent information such as curriculum documents for mapping, development and validation of the research instruments by five TLE experts, editing and finalization of the instruments considering the comments and suggestions of validators. The researcher also secured the notice to proceed in the conduct of the study from Philippine Normal University Ethics Committee.

The letters were sent to Division Offices of the SHS that participated in this research endeavor. The researcher secured the Division Offices' approval of the letter of request to gather data and their letter of endorsement which were then forwarded to the respective SHS principals. The letter of endorsement provided from different Division Offices and other supporting letters of request to gather data to target participants and their superiors to seek their consent to participate in the study were submitted online. The Google links for survey questionnaires were sent to each SHS after getting the go signal from concerned SHS principals. Focus group discussion and virtual class observations were scheduled by the Principals and Master Teacher of every school.

Phase II was the actual data collection - As soon as the letter of consent from the participating SHS supervisors and participants were collected and secured, gathering of data followed. Data were gathered using survey questionnaires in Google Form as data gathering was done online due to the declaration of Enhanced Community Quarantine because of COVID-19. The gaps were identified by mapping the Teacher Education Curriculum vis-à-vis the PPST Standards for beginning TVL-HE teachers, K to 12 Curriculum Guide for Senior High School, and the industry competency needs drawn from the responses of SHS TVL-HE teachers and industry practitioner participants, where the similarities and differences of the mapped curriculum competencies were noted and tabulated.

Before the interview and FGD was conducted, the researcher communicated with the SHS Principal and Master teachers with the letter of consent and form that was accomplished by the participants. They contacted their teachers and scheduled the dates for an online interview. Teachers were given a short orientation on the purpose of the study and the flow of the question and answer. During the interview and FGD, audio recording was not allowed by the participants. After the interview and FGD, responses given by the participants as noted by the researcher were read to them for confirmation and validation. During the virtual observation of classes, video recording was also prohibited so the researcher took note of the important details that supplied all the needed information for the topic being studied. Recordings of the researcher were also shared with the teachers observed for their verification.

Phase III is the designing of training model - based on the analysis of data from the demands and the required competencies from TVL-HE teachers, identified gaps from the mapped Teacher Education Curriculum, PPST Standards, K to 12 curriculum competencies, and industry needs from the SHS-TVL graduates. These data were considered in the design of the proposed training model which then influenced the proposed training program for TVL SHS-HE beginning teachers.

FINDING AND DISCUSSION

The following are the results of the study

Objective 1: Identify the demands and requirements for Senior High School Home Economics beginning teachers based on the:

Based on the K to 12 Program

Table 1 shows the required qualifications of the beginning teachers teaching SHS-TVL-HE strand based on the CMO No. 79 s. 2017 and DepEd Order (DO) No. 3 s. 2016. It can be gleaned from Table 5 that 100% of the SHS-TVL-HE teacher participants have met the basic requirements to teach with their obtained bachelor's degree and by being a LET passer. However, not all SHS-TVL-HE teachers pursue further studies. Aside from the requirements presented in Table 1, the respondents reported that they were also required to submit their professional portfolio, diploma, TVET training certificates, and employment certificate when they applied as

SHS-TVL-HE teachers. These stringent requirements for HE teachers finding a job in schools confirm observations in different Asian countries and in the world for the demand for high quality teachers (Billetteft, 2011). Beginning teachers need to show proof that they meet the standards of proficiency required by the teaching profession (Taylor, 2016). This is why it is necessary for TEIs to provide training for those who want to become teachers but do not meet the standards of the teaching profession (Barber & Mourshed, 2009; Bransford & Darling-Hammond, 2005; Hattie, 2003).

Table 1: *Required Qualifications of Beginning SHS-TVL Teachers and Percentage of Sampled Teachers Meeting the Requirements*

Requirements for SHS Beginning Teachers Based on the K to 12 Program	Source (Documents)	% of SHS Teachers Meeting the Requirements (n=36)	Respondent codes of those who mentioned the requirements
1. Bachelor's degree holder	DO No.3 s.2016 p.5	100%	T4
2. Licensed teacher	DO No.3 s.2016 p.6	100%	T20 & T22
3. Master's degree holder/ or with academic units	CMO No.79 s.2017 p.15	50%	T6,19 & 21
4. With National Certification in TESDA	CMO No.79 s 2017 p.15	69.44%	T1-4,7,9-12,17-22,24,25,27,31-33,35
5. Passer of Trainer's Methodology 1	DO No.3 s.2016 p.6	53%	T14,8,12,15,17-19,23,25,27, 33-35
6. 5 years industry experience	CMO No.79 s.2017 p.11	5.56%	T7, 11 &17
7. 1 year Very Satisfactory teaching experience	DO No.3 s.2016 p.11	2.78%	T26

1.2 Based on TESDA Competency Requirements

Table 2 shows the results of the analysis made on the TESDA competency standard requirements when mapped with what the K to 12 Curriculum for HE requires.

Table 2: *Competencies Lacking in K to 12 Curriculum When Compared with TESDA-CBC and Industry Needs*

HE subjects	TESDA-based Competencies not in K to 12 Curriculum	Industry Needs Not Present in K to 12 and TESDA-based competencies
Beauty Care	Facial care, management of salon, and professionalism	Procurement of salon tools and equipment including facial make-up
Food and Beverage Service	Management competencies such as: teamwork, professionalism, resourcefulness	Responding to customers' queries using recent online business approaches; academic competencies; industry sectoral-technical competencies
Bread and Pastry Production	Baking quick breads, muffins, shortcakes, doughnuts, fritters, pancakes, waffles, and cookies	3-5-hour training on cake specialties
Cookery	Communication, teamwork, professionalism, skills in computer operation	Openness for innovations in cookery and "accommodating allergies"
Dressmaking and Designing	Career professionalism; ability to distinguish specific patterns, and design commercial patterns	Technical know-how in using <i>Corel</i> , <i>photo shop</i> , and individual portfolio where wardrobe designs are drawn; correct placement of wardrobe to mannequins and inclusion of beauty products in fashion design; and knowledge on historical influence in modern fashion
Tourism Promotion Services	Teamwork, efficient communication skills, resourcefulness, professional advancement	Flexibility, resiliency, willingness to be trained, professionalism, leadership, and commitment
Caregiving	Commitment to work, good teamwork, resourcefulness, wise use and maintenance of caregiving facilities and equipment, personal and professional growth for advancement	At least 5'4" in height, at least 20 to 40's and strong enough to carry an old patient (client) most especially in case of emergency; English language communication skills specially when dealing with foreign employer/s; respect, empathy, and compassion towards clients
Related Handicrafts	Career professionalism	Knowledge in weaving; willingness to be trained; and good working attitude

As shown in Table 2, there were those required in TESDA that were missing in the K to 12 curriculum. There were also global and local or “glocal” industry-set competencies that should be given attention and action by SHS-HE beginning teachers. Table 2 summarizes the results of the mapped curriculum by subject area and the competencies that are lacking from the K to 12 curriculum but present in TESDA curriculum and in glocal industry needs.

There are hard skills found in different HE areas that need to be given attention and action by those teachers handling TVL-HE subjects in Bread and Pastry Production (basic skills competencies on Quick Breads: muffins, shortcakes, doughnuts, fritters, pancakes, waffles, and cookies), in Beauty Care (Facial Care: facial treatment and facial make-up), in Cookery (Computer Operation skills specifically for product endorsement and marketing, accommodating food allergies), in Food and Beverage Service (responding to customer queries using online business approaches), in Dressmaking and Designing (know-how in using Corel and photoshop computer applications in creating individual portfolio of drawn and designed wardrobe, correct application of wardrobe to mannequins and using beauty products suitable to the outfit), in Tourism and Promotion Services (resilience and flexibility when at work), in Caregiving (maintenance of caregiving facilities and equipment, at least 5’4” and above, 20-40 years old and strong enough to carry the patient during emergency situations), and in Related Handicrafts (knows how to weave and has positive working attitude).

Aside from hard skills, there were also soft skills not found in K to 12 curriculum learning competency standards but found in TESDA curriculum. These are management skills, resourcefulness, teamwork, professionalism, and good communication skills. As mentioned by Grollmann (2008) instructors, mentors, and supervisors in organizations, private business entities, and accredited training centers must be upskilled on complex and intricate competencies

1.3 Based on Industry Needs

Table 2 (third column) also shows the competencies required by the industry owners, managers, and practitioners from SHS-TVL-HE graduates but not provided in the K to 12 SHS-TVL-HE curriculum. These competencies are more specific, unique, and very practical skills related to different HE subject areas. It is repeatedly mentioned that the qualities needed by the industry from SHS TVL-HE graduates include having positive work values and attitudes, trainability or teachability, willingness to pursue higher level of education, innovativeness, resourcefulness, perseverance, preparation for the world of work, and National Certification from TESDA. All of these requirements are possible if the teachers handling TVL-HE classes were also immersed in the industry. Such industry immersion will expose them to different unique tricks and techniques in performing the different hands-on practical skills in different areas in HE including how to operate power tools. These skills should be taught to SHS TVL-HE students to be industry-ready.

Some unique skills and requirements that the industry needs are massage therapy for Beauty Care Area; versatility, initiative, flexibility, and commitment to work for Food and Beverage Service Area; actual cooking with innovation for Cookery Area; at least college graduate and with know - how on using Corel and photoshop for Dressmaking and Fashion Designing Area; must be at least 5’4”, 20-40 years old and strong enough to carry an old patient (client) most especially in case of emergency for Caregiving Area; must have great interest in baking for Bread and Pastry Production Area; must have broad knowledge when it comes to many aspects related to tour guiding particularly in agri-tourism, ecotourism, handicraft-making, and the likes for Tour Guiding Area; and good working attitude, weaving skills, and willingness to be trained for Related Handicrafts Area. As mentioned by Ondieki et al. (2018), industry-based immersion is said to be an effective way to train both undergraduate students and newly hired employees, because through students’ immersion in the industry, they are exposed to actual hands-on skills in a wider range using new technologies that could help them meet effectively the workforce needed in the industry.

Based on the Philippine Professional Standards for Teachers

Tables 3 to 9 show the indicators formulated in question form for each of the seven (7) domains in the PPST and the percentage of beginning HE teachers who claimed they could demonstrate the competencies. As PPST defines teacher quality and serves as the reference for teachers’ continuing professional development (DepEd, 2017), this was referred to determine what the needs are of beginning HE teachers for their continuing professional development, which should be an input to the proposed training model. In the PPST, it is the

indicators for beginning teachers, which is the first of the four career stages of a teacher that was focused on in this investigation. The beginning teacher indicators represent all the seven domains in PPST, which are: Content Knowledge and Pedagogy; Learning Environment; Diversity of Learners; Curriculum and Planning; Assessment and Reporting; Community Linkages and Professional Engagement; and Personal Growth and Professional Development. The competency-standards for teachers set in PPST are expected to be satisfied by the teachers when they embark into the teaching profession including communication skills.

Domain 1 (Content Knowledge and Pedagogy.

Table 3 shows the results of responses of SHS-TVL-HE teachers as to their actual experiences in relation to Domain 1 indicators in PPST.

Table 3 Needs of SHS-HE Teachers vis-à-vis PPST Domain 1 on Content Knowledge and Pedagogy

PPST code	PPST Domain 1 indicators	% of SHS teachers meeting the requirements (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI1.1.1	Can you demonstrate content knowledge and its application within and/or across curriculum teaching areas expected from you as TVL-HE teacher?	94.44%	"I am not handling the subject area of my specialization". (T19)
BTI1.2.1	Can you demonstrate understanding of research-based knowledge and principles of teaching and learning as TVL-HE teacher?	69.44%	"I don't have the chance to do research." (T21)
BTI1.3.1	Can you show the skills in the positive use of ICT to facilitate the teaching and learning process as TVL-HE teacher ?	91.66%	"We are not yet equip [sic] with some Computer apps that we can use during our virtual synchronous teaching". (T17)
BTI1.4.1	Can you demonstrate knowledge of teaching strategies that promote literacy and numeracy in teaching skills among TVL-HE students?	94.44	"An action plan or a fixed budget for the activities that require buying materials for the performance tasks of the students." (T23)
BTI1.5.1	Do you apply different strategies of developing critical and creative thinking, as well as other higher-order thinking skills to your TVL-HE learners?	100%	"Yes, training to the private and professional partners which can share the latest trends and methods of teaching specific subjects in HE." T17
BTI1.6.1	Are you experiencing difficulty in using Mother Tongue, Filipino and English to facilitate teaching and learning in the TVL-HE subject area?	30.55%	"Because I can speak Filipino and English only." T21
BTI1.7.1	Do you use range of verbal and non-verbal classroom communication strategies that support learner understanding, participation, engagement and achievement in the TVL-HE subject area?	100%	No evidence

It can be gleaned from Table 3 that beginning HE teachers need more help in five Beginning Teacher Indicators (BTIs) as 31% of them expressed difficulty in using Mother Tongue, Filipino, and English in teaching and learning TVL-HE subject area (BTI1.6.1); about 31% claimed they need research-based knowledge and principles of teaching and learning TVL-HE (BTI1.2.1); about 8% of them need training on the positive use of ICT (BTI1.3.1); about 6% claimed they do not possess the content knowledge and its application within and across curriculum areas in TVL-HE (BTI1.1.1); and also about 6% claimed they need help in applying varied strategies for promoting literacy and numeracy. Two of the BTI indicators in the Domain of Content Knowledge and Pedagogy are areas that the beginning teachers claimed they can

demonstrate. These BTIs are on applying different strategies in developing critical and creative thinking, as well as other higher-order thinking skills to TVL-HE learners (BTI1.5.1) and using varied classroom communication strategies in teaching TVL-HE subject area (BTI1.7.1).

Domain 2 (Learning Environment). Table 4 shows the areas of needs of beginning SHS-TVL-HE teachers in the second domain of PPST on Learning Environment.

Table 4 Needs of SHS-HE Teachers Vis-à-Vis PPST Domain 2 on Learning Environment

PPST code	PPST Domain 2 indicators	% of SHS teachers meeting the requirement s (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI2.1.1	Can you demonstrate knowledge of policies, guidelines and procedures that provide safe and secure learning environments in the SHS-HE classes?	97.22%	"Dati naalala ko nagnapadala ako ng kitchen tools sa mga bata. minsan may nagdala ng kutsilyo, late ko nang na-realize na mali pala yun, kasi it is, delikado. 'Di ko na inulit, nakakatakot" [Before, I remember asking the students to bring kitchen tools. One time, someone brought a knife. Late did I realize that it is wrong because it is dangerous. I did not repeat it; it was scary.] (T1)
BTI2.2.1	Can you demonstrate understanding of learning environments that promote fairness, respect, and care to encourage learning in your SHS-HE classes?	61.11	"There is no water supply and no sink." (T2) "There are not enough school facilities, tools and equipment. No available class and laboratory rooms for hands-on activities." (T1,2,7,8,9,18,21,31,32,33)
BTI2.3.1	Can you demonstrate knowledge of managing classroom structure that engages learners, individually or in groups, in meaningful exploration, discovery and hands-on activities within the available physical learning environments in your SHS-HE classes?	97.22%	"There are no available laboratory rooms/s no available materials for Bread and Pastry in 2016-2017". (T18)
BTI2.4.1	Can you demonstrate understanding of supportive learning environments that nurture and inspire learner participation in your SHS-HE classes?	97.22%	"We are not yet equip [sic] with some computer apps that we can use during our virtual synchronous teaching. The teacher's gadget must be fast facing [sic]". (T17)
BTI2.5.1	Can demonstrate knowledge of learning environments that motivate learners to work productively by assuming responsibility for their own learning in their SHS-HE lessons?	100%	No evidence
BTI2.6.1	Can you demonstrate knowledge of positive and non-violent discipline in the management of learner behavior in your SHS-HE classes?	97.22%	"My problem are my students. They are not responding during virtual meetings and not complying their tasks in our class". (T23)

As shown in Table 4, about 39% of the beginning HE teachers need help in providing a fair learning environment for their classes (BTI2.2.1). About 3% of them claimed they failed to consistently practice ensuring learner's safety and security (BTI2.2.1); applying good management of classroom structure and activities (BTI2.3.1); supporting learners' participation (BTI2.4.1); and managing learners' behavior when teaching them (BTI2.6.1). It is only in (BTI2.5.1) where 100% of the beginning teachers did not report any difficulty in the promotion of purposive learning. This means that they can demonstrate knowledge of learning environments that motivate learners to work productively by assuming responsibility for their own learning.

Domain 3 (Diversity of Learners). Table 5 shows the needs of the beginning SHS-TVL-HE teachers in terms of the PPST third domain indicators.

Table 5 Needs of SHS-HE Teachers Vis-à-Vis PPST Domain 3 on Diversity of Learners

PPST code	PPST Domain 3 indicators	% of SHS teachers meeting the requirements (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI3.1.1	Can you demonstrate knowledge and understanding of differentiated teaching to suit the learners' gender, needs, strengths, interests and experiences in your SHS-HE classes?	94.44%	"Students will learn more if the school have enough facilities and equipment for teaching so the students will (adopt) [sic] and learn easily". (T29)
BTI3.2.1	Do you implement strategies that are responsive to the learner's linguistic, cultural, socio-economic and religious backgrounds when teaching SHS-HE?	100%	No evidence
BTI3.3.1	Do you use strategies that are responsive to learners with disabilities, giftedness and talents?	100%	No evidence
BTI3.4.1	Do you respond to the educational needs of learners in difficult circumstances including: geographic isolation; chronic illness; displacement due to armed conflict, urban resettlement or disasters; child abuse and child labor practices ?	94.44%	"Well-planned schedule of laboratory time, like giving enough time to perform the tasks". (T2)
BTI3.5.1	Can you demonstrate knowledge of teaching strategies that are inclusive of learners from indigenous groups	100%	No evidence

As shown in Table 5, about 6% of the beginning SHS-HE teachers need help in demonstrating knowledge and understanding of differentiated teaching to suit the learners' gender, needs, strengths, interests and experiences in your SHS-HE classes (BTI 3.1.1) and in responding to the educational needs of learners in difficult circumstances including: geographic isolation; chronic illness; displacement due to armed conflict, urban resettlement or disasters; child abuse and child labor practices (BTI3.4.1).

Domain 4 (Curriculum and Planning). Table 6 shows the needs of the beginning SHS-TVL-HE teachers in terms of the PPST four domain indicators on Curriculum and Planning.

Table 6 Needs of SHS-HE Teachers Vis-à-Vis PPST Domain 4 on Curriculum and Planning

PPST code	PPST Domain 4 indicators	% of SHS teachers meeting the requirements (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI4.1.1	Do you prepare developmentally sequenced teaching and learning process to meet curriculum requirements in SHS-HE?	100%	"Suggested that DepEd must involve SHS TVL-H. E. teachers for Curriculum enhancement planning and write shop". "Provide more soft-skills training like how to do action research." (T19)
BTI4.2.1	Can you identify learning outcomes that are aligned with learning competencies in SHS-HE?	100%	"Suggested that DepEd must provide an updated curriculum guide to be used in teaching". (T30) "I am not handling the subject area of my specialization". (T19)
BTI4.3.1	Can you demonstrate knowledge in the implementation of relevant and responsive learning programs in SHS-HE?	97.22%	"There are no facilities, no laboratory room/s, no tools and equipment, that somehow I cannot share or give the knowledge and skills to my students very well. 'Yan po naging struggles ko talaga [Those were really my struggles]"(T19).
BTI4.4.1	Do you seek advice concerning strategies that can enrich teaching practice of SHS-HE?	100%	"Training to the private and professional partners which can share latest trends and methods to the specific subject in H.E.". (T1)
BTI4.5.1	Can you show skills in the selection, development and use of a variety of teaching and learning resources, including ICT, to address learning goals in SHS-HE?	100%	"There must be ICT Tech-Voc training by school". (T17)

As shown in Table 6, the beginning SHS-HE teachers need help only in demonstrating knowledge in the implementation of relevant and responsive learning programs in SHS-HE (BTI 4.3.1).

Domain 5 (Assessment and Reporting). Table 7 shows the training needs of beginning SHS-TVL-HE teachers in terms of the PPST indicators for the domain on Assessment and Reporting. It can be inferred from Table 7 that about 6% of the beginning SHS-TVL-HE teachers need further training on a range of strategies for communicating learner needs, progress and achievement in SHS-HE (BTI 5.4.1). About 3% of these teachers need further training in designing, selecting, organizing, and using diagnostic, formative and summative assessment strategies consistent with curriculum requirements of SHS-HE (BTI 5.1.1).

Table 7 Needs of SHS-HE Teachers Vis-à-Vis PPST Domain 5 on Assessment and Reporting

PPST code	PPST Domain 5 indicators	% of SHS teachers meeting the requirements (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI5.1.1	Do you design, select, organize and use diagnostic, formative and summative assessment strategies consistent with curriculum requirements of SHS-HE?	97.22	"There must be a separate Tec-Voc training only on test construction". (T17)
BTI5.2.1	Do you monitor and evaluate the learner's progress and achievement using learner attainment data in SHS-HE?	100%	No evidence
BTI5.3.1	Do you provide timely, accurate, and constructive feedback to improve learner performance in SHS-HE?	100%	No evidence
BTI5.4.1	Are you familiar with a range of strategies for communicating learner needs, progress and achievement in SHS-HE?	94.44	"My problem is my students. They are not responding during virtual meetings and not complying with their tasks in our class". (T4)
BTI5.5.1	Do you use assessment data as feedback in teaching and learning practices and programs in SHS-HE?	100%	"D.O. must survey what specific area that a teacher needs to undergo training and NC2 Assessment that is aligned to the subject the teacher is teaching." (T22)

Domain 6 (Professional Engagement and Community Linkages). Table 8 shows the training needs of beginning SHS-TVL-HE teachers in terms of the PPST indicators for the domain on Community Linkages and Professional Engagement.

Table 8 Needs of SHS-HE Teachers Vis-à-Vis PPST Domain 6 on Community Linkages and Professional Engagement

PPST code	PPST Domain 6 indicators	% of SHS teachers meeting the requirements (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI6.1.1	Do you establish a learning environment that is responsive to community contexts?	100%	"Every year we have a month-long Culminating Activity called Tech-Volympics. This is a friendly competition given to all classes taking specialization to showcase the talents and the skills they learned and acquired from their classes". (T17)
BTI6.2.1	Do seek advice concerning strategies that build relationships with parents/guardians and the wider community?	100%	"Shared responsibilities among teachers to learners and their family members is stressed." (T24)
BTI6.3.1	Are you aware of the existing laws and regulations applicable to the teaching profession and your responsibilities specified in the Code of Ethics for Professional Teachers?	100%	"We are having a problem in the implementation of the immersion, because we teachers are the one looking and dealing with partner industry". T19
BTI6.4.1	Are you strictly following the school policies and procedures to foster harmonious relationship with the wider school community?	100%	"There must be a tie-up. Letters must come from the Division office, MOA for the proposed immersion must be provided by the DepEd Central, that's the time, we will carry and bring the MOA to our partner industry". (T19)

It can be gleaned from Table 8 that no teacher declared need for further training on any indicator of Domain 6 on training Community Linkages and Professional Engagement.

Domain 7 (Personal Growth and Professional Development). Table 9 shows the training needs of beginning SHS-TVL-HE teachers in terms of the PPST indicators for the domain on Personal Growth and Professional Development.

Table 9 Needs of SHS-HE Teachers Vis-à-Vis PPST Domain 7 on Personal Growth and Professional Development

PPST code	PPST Domain 7 indicators	% of SHS teachers meeting the requirements (n=36)	Examples of FGD responses indicative of needs by SHS-HE teachers
BTI7.1.1	Do you practice a personal philosophy in teaching that is learner-centered?	100%	"Yes, for the core and applied subject but more LP making. Regarding skills, I enrolled myself for upgrading. Before I was hired in SHS, I had to attend a lot of skills training from TESDA to equip myself for the battle." (T32)
BTI7.2.1	Do you uphold the dignity of teaching as a profession by exhibiting qualities such as caring attitude, respect and integrity?	100%	"There must be a range of different levels of skills specific to the field in HE that teachers must be trained on most especially those who are not that knowledgeable enough to teach". (T5)
BTI7.3.1	Do you seek opportunities to establish professional links with colleagues in SHS-HE?	100%	"Our heads should undergo training on TESDA in terms of operation so that they are able to grasp the needs of the teachers, students and the subjects" (T11)
BTI7.4.1	Can you understand how professional reflection and learning can be used to improve practice in SHS-HE?	100%	"There is no free or school provision on trainings, but they encourage us to attend trainings on our expense" (T5)
BTI7.5.1	Do you have the motivation to realize professional development goals based on the Philippine Professional Standards for Teachers?	100%	"The training provided by the Division office is not appropriate for our subject area, Like ICT "Nag training kami to migrate and to upgrade NC's. (We had training to migrate and to upgrade NC's). I am attending private training and financing the training from my own pocket because I believe that I need to update myself for my students". (T19)

Similar to Domain 6, as shown in Table 9, no beginning SHS-HE teacher declared need for further training on any indicator of Domain 7 on Personal Growth and Professional Development.

Based on the quantitative data and verbatim responses indicated in Tables 3 to 9, it can be inferred that beginning SHS-TVL-HE teachers need further training on some competencies expected of them as professional teachers based on PPST predominantly in the domain of Content Knowledge and Pedagogy followed by the domain of Learning Environment.

One clear need was on the use of Mother Tongue, Filipino, and English to facilitate teaching and learning in the TVL-HE subject area (from BTI1.6.1 of Domain 1 on Content Knowledge and Pedagogy). This result corroborates with what the industry-based practitioners have expressed as their need from students graduating from SHS-TVL-HE track.

They emphasized the need for them to be good particularly in English communication, especially for those who get employed as caregivers who deal with foreign employers. This kind of training is something that could be provided by the TEIs. They need to provide greater exposure to would-be teachers in communicating in English so that they could demonstrate the same to their students. When they get to be trained further when they are already hired in schools, they need to learn to communicate with one another, not only in using Filipino and Mother Tongue, but using English as well as medium of communication and instruction.

Another area of need in Domain 1 is on the use of research-based knowledge and principles of teaching and learning in TVL-HE area (BTI 1.2.1). A greater percentage of beginning teachers indicated that they have not been exposed to research.

Looking at the demands of the industry-based practitioners, the same need was expressed when one said for those involved in tour guiding that “they must have broad knowledge when it comes to many aspects relative to tour guiding particularly in agritourism, ecotourism, and handicrafts making” (Tour Guiding Practitioner for 17 years). Another industry-based practitioner also mentioned about the need for SHS-HE graduates particularly those who intend to venture into Cookery as they need to be “open for innovations and also to know how to accommodate food allergies” (Hotel Manager for 10 years).

Another important area for training of beginning HE teachers is on how to establish learning environments that promote fairness, respect, and care to encourage learning in your SHS-HE (from BTI2.2.1 of Domain 2 on Learning Environment). Some industry-based practitioners expressed the need for the SHS-HE graduates to show professionalism especially in Tourism Promotion Services and in Food and Beverage Services. This professionalism includes being courteous, respectful, caring, and fair in the way they deal with their customers, which is necessary to keep them from patronizing their services.

These identified needs from graduates of SHS-HE should be stressed by their teachers in their day-to-day instruction. Hence, the beginning HE teachers should be trained on how to use simulations of the conditions in the workplace so that they get to practice their students on how to behave and communicate with their customers or clients. As Modi (2017) stated, skill development programs of vocational teachers should be organized for alignment of their competencies to meet the industry requirements through a system of accreditation, quality control, and quality assurance.

Moreover, as indicated in DepEd Order No. 42 s.2017, the PPST aims for the teachers to meet a well-defined career progression from beginning to distinguished, for them to engage themselves to give efforts continuously and actively towards achieving proficiency by attending professional training for personal improvement and professional development (DepEd, 2017b).

Furthermore, as stipulated in DepEd Order No. 001s. 2020, DepEd, through the efforts of the National Education Academy of the Philippines (NEAP), commits to provide professional teachers and leaders appropriate professional growth and lifelong learning through attending professional development program that they need in various platforms and models that include formal trainings and workplace learning (DepEd, 2020).

Objective 2. Describe the teaching practices of beginning SHS HE teachers and their alignment with the demands of professional standards and industry needs; and

Teaching and Training Practices of SHS-TVL-HE Teachers and Alignment with PPST and Industry Needs

Table 10 shows the teaching practices of beginning SHS-TVL-HE teachers and their alignment with the demands of PPST and industry needs.

Table 10
Practices of Beginning SHS-TVL-HE Teachers and Alignment with PPST and Industry Needs

Teaching practices	Needs related to training	Needs related to PPST Beginning Teacher Indicators	Needs related to industry
1 Alignment of teachers' teaching assignment with area of specializations	"Have the teacher training which is aligned to their area of specialization. vertical articulation should be followed". (T32)	BTI 1.1.1: "We need to focus and master the subject area that we teach. Since SHS has two semesters with different subjects, we need a training focused on the specialization of the subject area". (T6)	"Home Economics subject area teachers must have an immersion with the industry so that they will be able to experience how to do the different skills related to the subjects in Home Economics strands. The teacher must be an NC 2 Passer". (FBS IM FBS & Cookery IM & IO)
2 Attending skills training organized by the division and private sectors	"Attending free training provided by Saint Francis". (T21) "Yes, training from the private and professional partners which can share the latest trends and methods to the specific subject in HE". (T17)	BTI 7.5.1 "School-based and Division-Based Seminar/ Webinars in all aspects like: formative and summative assessment, how to write a module, video making, how to use different online platforms, how to use "Canva" for learning". (T20)	HE Teacher that is Certified "Are willing to be mentored and be trained" (Bakery IO) HE Teacher that is Teachable & Trainable
3 Community immersion	"Whenever there is a culminating (activities) [sic], there must be an activity proposal so that there will be an allocated budget for the snacks of the students, teachers and invited guests". (T19)	BTI6.2.1: "Every year we have a month-long Culminating Activities called Tech-Olympics. This is a friendly competition given to all classes taking specialization to showcase the talents and the skills they learned and acquired from their classes". (T17)	"Teachers must also have immersion in any Fashion Designing company to expose themselves to the actual fashion designing world." (D&D IP) HE Teacher that is Immersed
4 Complete tools and equipment for hands-on activities and performance tasks	"Complete tools and equipment for hands-on activities and performance tasks for the senior high school students." (T22, 25 & 26)	BTI2.4.1: "Providing learning resources". (T 30)	"Know-how to use Corel and Photoshop. Know how to use computer skills programs aside from Microsoft office suite. Expert designers would suggest that new applicants will still enroll in higher level fashion designing courses to upgrade their skills". (D & D IP) HE Teacher that is knowledgeable and prepared to pursue higher level of education
5 Having laboratories per area of specialization	"We have laboratories per area like Bread and Pastry Lab, FBS Lab and Cookery Lab with complete facilities and well equip where students can practice and perform teachers as well". (T21)	BTI 4.5.1. "We have laboratory room for different areas, we have good partnership with other SHS, Laboratory tools, utensils, materials, equipment and facilities are classified already". (T21)	"Must have knowledge on food safety and sanitation and skills in actual cooking and baking in the kitchen and bakery". (Bakery IO) "Mapamaraan, madiskarte sa pagluluto ng kakaibang putah" HE Teacher that is skillful, responsive, & innovative
6 Specialized training and partnership with industry and TESDA Centers for immersion	"NEAP Provided (MTOT) Mass Training for Teachers in 2016-2017". T17 2017-2018 - Training for RECT". T17	7:7.5 - 2018-2019 - Writeshop - Construction of Assessment or Exam. Tech-Voc training on how to conduct immersion (TESDA Anchored). Constant Training given by NEAP on construction of Lesson Plan. Live-in Trainings for Trainers. And Skills training from Training Center Communities". T18	"They must have actual training in Caregiving babies, toddlers, children, adults, elders and people with special cases". "Have long patience for the patient or client". Caregiver (IP) HE Teacher that is trainable and with positive work attitude
7 Attending Learning Action Cells (LAC)	"LAC Sessions with fellow HE teachers, and allowing training outside school via TESDA Accredited Centers." T23	7:7.3 & 7.4 "We have LAC, where we are talking about the best practices by having group sessions, brainstorming, sharing of ideas on topics like: How to effectively teach their subject area (teaching strategies)". T22	"They are given the chance to be hired in the company, but they will be given training and will be hired according to what skills they have already acquired". D & D IP Teacher that is highly qualified

As shown in Table 10, there are seven (7) good practices of beginning SHS-HE teachers, namely: a) alignment of teachers' teaching assignment with one's area of specialization; b) attending skills training organized by the division and private sectors; c) community immersion; d) having complete tools and equipment for hands-on activities and performance tasks; e) having laboratories per area of specialization; f) having specialized training and partnership with industry and TESDA Centers for immersion; and g) attending Learning Action Cells (LAC). These practices are also covered in the trainings given to the beginning HE teachers, which are justified as they are also mapped to the PPST beginning teacher indicators as aligned as well to the industry needs.

However, teachers encountered challenges in how they were trained, which have affected their demonstration of the PPST-BTIs and those needs expressed by the industry. These challenges include training using their own money, lack of laboratory for training, lack of training on materials development, assignment to subject areas that are not their area of specialization.

Training Using Their Own Money. Some of them attended training outside school using their own money.

Lack of Laboratory for Training. They had no available laboratory for Cookery, Food and Beverage Service, and Bread and Pastry Production. Some had insufficient laboratory facilities and equipment in their workplace, and no facilities available at home during the pandemic.

Lack of Training on Materials Development. Some lacked training on how to make instructional materials and use ICT for synchronous or virtual classes.

Assignment to Subject Area Not Aligned with Area of Specialization. Some TVL-HE beginning teachers handled subjects which were not their area of specialization. They claimed there was no expert HE teacher yet in their school. According to the teachers, there was a lot of paperwork to accomplish, and they also experienced problems in the implementation of the community immersion because of difficulty in looking for possible industry partners.

Moreover, Table 10 also shows the responses of the industry practitioners of the knowledge, skills, and attitudes they are expecting both from the teachers handling TVL-HE subjects and the SHS-TVL-HE graduates after their industry immersion as part of their training to be industry-ready once they have completed their SHS-TVL-HE course. Their needs were thematized that led to the acronym TRICKS-WHIP to mean: T for Trainable, R for Responsive, I for Innovative, C for Certified, K for Knowledgeable, S for Skillful, (TRICKS) that blends With positive work attitudes, Highly qualified, Immersed and Prepared students to pursue higher level of education and be hired by the industry.

It can be inferred that the teaching practices of the HE teachers showed the need to meet the quality requirements of PPST and industry needs. Thus, gaps or barriers found that caused the mismatch of knowledge and skills may be addressed through additional training. As Yee (2018) suggested, mismatch in knowledge and skills maybe bridged and solved by considering a training model relevant to the needs of SHS TVL-HE teachers, which in turn will help them provide quality education to SHS TVL-HE graduates to be hired once they apply for a job in the industry. As McSweeney (2014) posited, HE tends to be the subject that facilitates good practice and knowledge in its multi-disciplinary core areas, such as nutrition, health sciences, and social policy. Confait (2015), stated that for the pre-service teachers to have a successful preparation, they must envision themselves to acquire different teaching strategies with a good disposition to learn in and from the practice.

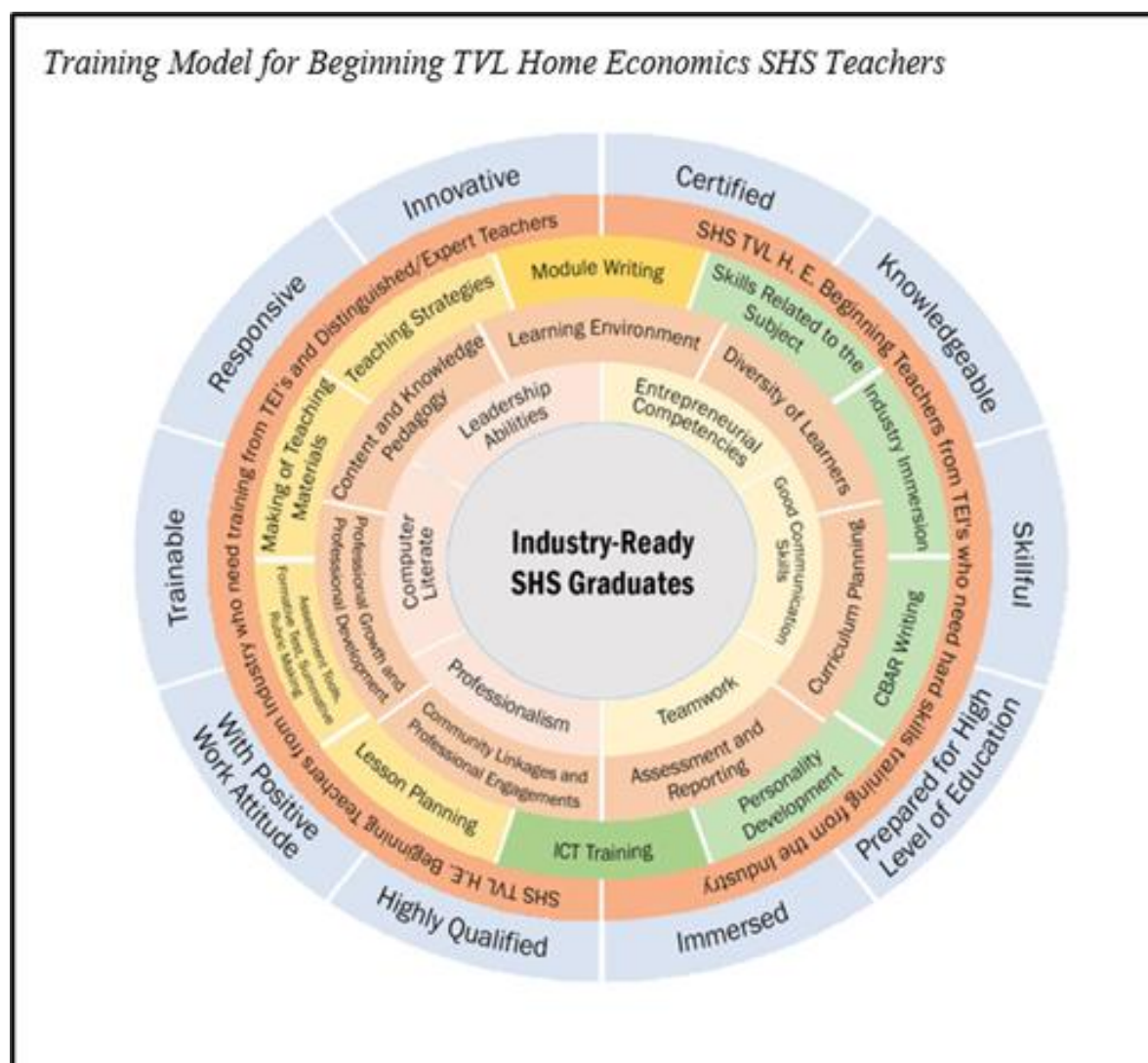
Objective 3. Design a training model for beginning TVL-HE teachers.

Proposed Training Model for Beginning TVL-Home Economics Teachers

Figure 3 shows the components of the proposed training model to start from the inner or centermost part of the circle going to the outermost part. The training model for SHS-TVL-HE beginning teachers is designed

and presented in circular form to indicate unity, wholeness, and infinity in their training to progress from being a professional industry-ready beginning teacher to someone distinguished lifelong learner.

Figure 3:



The component of the first circle at the center is focused on the goal of the training model of having qualified SHS-HE beginning teachers to produce SHS graduates prepared to work in the industry. Harappa School of Leadership (2021) explained a good training model is designed with a goal to address the needs of the faculty and it must have learning objectives that could best lead towards the attainment of the goal. To achieve the goal, the remaining circles provide that information.

The component of the second circle contains the six common and core teaching and learning competencies present in all K to 12 and TESDA curricula that are needed in different SHS TVL-HE strand subjects. The required soft-and hard-skills competencies or attributes that the teachers handling TVL-HE subjects must possess which their TVL-HE students acquire as well when they finish SHS TVL-HE are: leadership abilities, entrepreneurial competencies, good communication skills, teamwork, professionalism and computer literacy. The leadership abilities refer to the capability of teachers to lead their students and for the students to lead their peers or classmates in performing hands-on activities in the classroom. Entrepreneurial competencies are common in all the learning competencies in all HE subjects because one of the main goals of the new curriculum is to teach and train the SHS-TVL students to have a micro-business and be productive and sustainable individuals. Good communication skills are also one of the core competencies for both the SHS teachers and students in order to express their ideas clearly and understandably (verbal and non-verbal). Teamwork is connected to good leadership because once the leader of a team gives good, inspiring, and clear

instructions, surely it will give good work output results. Professionalism is said to be the competence expected from professional individuals, which is the key to quality, efficient, and effective performance at work. Lastly, teachers and students are expected to be computer literate because nowadays, the teaching and learning process is done through a blended process. The online or virtual teaching –learning process recently applied in our education sectors brought by COVID-19 requires teachers to be knowledgeable and skillful on how to use electronic gadgets like cell phones, computer laptops, tablets, and others. The use of different computer applications is also advised for easy and fast communication in marketing and selling purposes of the finished products and/or services of the TVL-HE students, such as cooked meals, baked products, handicraft products, sewn dresses, massage therapy, hairdressing, giving nail care services, and others.

The component on the third circle consists of the seven (7) PPST domains wherein there are 37 indicators or strands (See Table 7). It shows more than 60 % of the teacher participants confirm that they are demonstrating the 37 PPST indicators in their in-service practice. However, they think that they still need to have retraining on some areas (particularly difficulty in using the mother tongue language, inability to produce research, and providing a safe and fair learning environment), as they honestly reflected and analyzed the indicators for their personal and professional improvement.

The component of the fourth circle from the center includes the training needs of teachers from the industry (on the left) and teachers from the TEIs (on the right). The training needs of those who came from the industry include lesson planning, construction of tests for formative and summative purposes, rubrics for practical and hands-on activities. On the other hand, the training needs of teachers from TEIs include ICT training, personality development, and Classroom Based Action Research. Both teachers who came from the industry and TEIs need ICT training and module writing.

The component of the fifth circle are the training providers and the training focus with the left side showing the SHS teachers coming from the industry that must be equipped with the teaching pedagogy from the TEIs, while at the right are SHS TVL-HE teachers from TEIs that need to be equipped with the skills needed in the industry that are expected to be provided through industry immersion. .

The component of the sixth and the last circle contains the themes **TRICKS** and **WHIP** taken from all the responses given by the industry sector. That once the TVL-HE teachers are equipped with all the required competencies, it will help ensure that the SHS-TVL graduates will have the vital qualities expected of SHS graduates—**Trainable** (willing to be trained even if they are already hired in a job), **Responsive**. (easily respond whenever needs arise in the work setting), **Innovative** (knows how to innovate or improve something to make things or outputs extra different and unique) , **Certified** (with NC certification as they apply for work), **Knowledgeable** (have enough knowledge in whatever tasks or workloads assigned to them), **Skillful** (possesses both soft and hard skills needed in the industry), **With positive work attitude** (that promotes good relationship in the workplace), **Highly qualified** (equipped beyond the necessary qualification needed in the industry), **Immersed** (have experienced industry immersion before graduation and hired for a job), and **Prepared for higher level of education** (still willing to pursue higher level of education for personal and professional growth) -to be hired and perform well in the industry.

The proposed training model contains the knowledge, skills, and attributes that a beginning SHS TVL-HE teacher should have. It can be of benefit to teachers to assess their level based on standards set and be knowledgeable of the industry needs that they will have to cater should they be hired in the industry. The training model bridges the gaps between theory and practice by ensuring that teachers from TEIs would gain more exposure through industry immersion while industry practitioners who become teachers will also have exposure on pedagogical skills needed such as lesson planning, developing instructional materials, and construction of assessment tools.

This proposed training model concretizes what Basu and Majumdar (2009) emphasized as a contextualized training model that may be designed to be reflective of the needs of the local setting. As Bransford and Darling-Hammond (2005) also advised, for teachers to have a successful preparation, they must envision themselves to acquire different teaching strategies and to have a good disposition to learn in and from practice.

CONCLUSIONS

Based on the results of this research, the following conclusions were made:

1. SHS-HE teachers need to undergo further training to meet fully the demands and requirements posed by DepEd, CHED, and industry.

1.1 Entrepreneurial skills competencies, specifically the hard skills, are needed by the beginning TVL-HE teachers in areas to include Beauty Care, Bread and Pastry Production, Food and Beverage Service, Cookery, Dressmaking and Fashion Designing, Tourism Promotion Services, Caregiving, and Related Handicrafts. Beginning HE teachers also need training on the use of power machines, Food photography, Corel Photoshop, and other modern technologies used in Home Economics.

1.2 Beginning HE teachers that are industry-based need soft skills such as leadership, professionalism, teamwork, and good communication skills to ensure harmonious relationship and camaraderie among colleagues and school stakeholders.

1.3 Industries need beginning HE teachers trained in their Teacher Education Curriculum with extensive skills on the use of power machines which can only be possible by including an industry immersion in the pre-service training program for TVL-HE specialists.

1.4 Beginning HE teachers need further training on some areas on content knowledge and pedagogy and learning environment defined in the PPST as they embark in their profession to make sure that they will be effective teachers.

2. Beginning HE Teachers attend Learning Action Cells, seminars, and other skills training, and pursue advanced higher education to grow and improve personally and professionally.

3. A training model is proposed to address the need for beginning HE teachers who possess the required competencies set by DepEd, TESDA, PPST and the industry in order to produce SHS-HE graduates that are employable and industry ready.

RECOMMENDATIONS

Based on the results of this research, the following recommendations are posited:

1. Beginning SHS-HE teachers must have re-training, re-tooling and upskilling of knowledge and hard skills they are not equipped with yet so that they will be able to respond to the needs of their learners.

1.1. Curriculum planners, division SHS supervisors, school principals, and SHS teachers should take part in revisiting and improving the K to 12 SHS Curriculum, TESDA CBC, as well as the global competency for the Philippine SHS-TVL-HE curriculum to ensure alignment of the learning competencies being taught to the needs of SHS-HE students.

1.2 There should be retreats and professional leadership training and language communication trainings to help enhance and improve the soft skills of HE teachers in dealing socially and professionally in their workplace.

1.3 TEIs should design a pre-service education program for TVL-HE specialists that require industry immersion to acquire actual skills in HE in various industry settings (e.g. bakeshop using various baking technology; food establishments using computer applications in promoting food specialties; dressmaking and fashion designing for knowledge and skills in Corel and Photoshop) to expose them on the actual scenario and

performance of actual skills in different subject areas they are teaching which in turn will be shared and taught to their SHS-TVL students to be industry-ready.

1.4. That the government must allocate funds for SHS laboratory rooms, laboratory tools, utensils, equipment, other teaching facilities and resources, and free training, workshops, write-shops, and webinars needed by SHS TVL-HE beginning teachers to be updated in the curriculum and respond to the needs of their students.

1.5 DepEd should tap private agencies accredited TESDA training and assessment centers to establish a strong partnership for extension service purposes like providing scholarship (for those teachers who would like to pursue higher education), sponsoring skills training and NC assessment for both TVL-HE teachers and SHS-TVL students.

1.6 There should be recollection activities for the teachers to reflect whether they are applying the seven PPST Domains and its 37 indicators in their actual teaching-learning process

2. Beginning HE teachers should continue participating and engaging in LAC sessions in schools for their professional improvement but they should apply learned knowledge and skills in their actual teaching to the SHS TVL-HE students.

3. The proposed training model for beginning TVL-HE teachers may be used as a basis by DepEd and other SHS offering TVL-HE in their induction program for beginning teachers to ensure that the teachers meet the K to 12 and TESDA curriculum, PPST, and the industry requirements. When such training model is used, further test of its effectiveness may be done for its improvement.

ACKNOWLEDGEMENT

The authors acknowledged the Philippine Normal University (Manila), the Home Economics Beginning SHS teachers, Senior High School Principals and Master Teachers, and the Industry Managers and practitioners and the Home Economics SHS teachers who participated in this study. Also, the researchers are grateful to Dr. Don David and Dr. Joseph Erfe, for the guidance, suggestions, and wisdom they contributed in the conduct of this study.

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