

# INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2025, Vol. 6, No. 8, 4018 – 4027

<http://dx.doi.org/10.11594/ijmaber.06.08.22>

---

## Research Article

### Experiential Learning in TLE Cookery Towards Soft Skills Among Grade 10 Learners

Hazel D. Ramirez\*

Master of Arts in Education Major in Technology and Home Economics, Laguna State Polytechnic University, 4000, Philippines

---

#### *Article history:*

Submission 31 July 2025

Revised 14 August 2025

Accepted 23 August 2025

#### *\*Corresponding author:*

E-mail:

[0321-0522@lspu.edu.ph](mailto:0321-0522@lspu.edu.ph)

#### ABSTRACT

This study investigates the relationship between experiential learning approaches in Technology and Livelihood Education (TLE) Cookery and the development of soft skills among Grade 10 students at Gaudencio B. Lontok Memorial Integrated School in Lipa City. Rooted in Kolb's Experiential Learning Theory, the research explores how learning strategies—active experimentation, concrete experience, reflective observation, and abstract conceptualization—enhance students' work-related soft skills such as communication, numeracy, problem-solving, learning adaptability, and teamwork.

Using a descriptive-correlational design and quantitative analysis, data were collected through surveys administered to 102 students. Findings revealed that experiential learning was positively perceived by students, particularly in fostering real-life engagement and reflective thinking. Among the four dimensions of experiential learning, concrete experience and reflective observation had the strongest associations with the development of soft skills. The study also found significant variations in perceptions and soft skill development when respondents were grouped by section, emphasizing the influence of instructional quality and classroom dynamics.

The research underscores the value of integrating experiential strategies into the TLE curriculum to improve both hard and soft skill acquisition, thus preparing students for employment or entrepreneurial pursuits. Implications suggest that curriculum planners, teachers, and school administrators should prioritize hands-on learning approaches to enhance student competencies aligned with workforce demands.

**Keywords:** *Experiential Learning, Active Experimentation, Concrete Experience, Reflective Observation, Abstract Conceptualization, Soft Skills, Communication Skill, Numeracy Skills, Learning Skills, Problem-solving Skills, Working with others*

---

#### *How to cite:*

Ramirez, H. D. (2025). Experiential Learning in TLE Cookery Towards Soft Skills Among Grade 10 Learners. *International Journal of Multidisciplinary: Applied Business and Education Research*. 6(8), 4018 – 4027. doi: 10.11594/ijmaber.06.08.22

## Background

The Department of Education published the Guidelines for the Implementation of Technology and Livelihood Education in Public and Private Secondary Schools in 2012. This DepEd Order, also known as DepEd Order No.67 s.2012, includes Technology and Livelihood Education (TLE) as a subject in the K to 12 Basic Education Program. These are excellent ways for students to make money once their studies are completed.

Further, Ingal (2015) Technology education enables students to explore their ideas, gain practical experiences, and work through thinking processes in a safe and supportive environment. The ability to adapt to a changing technological society and to accept social responsibility is paramount to all young learners in the pursuit of new careers and lifestyles. It allows learners to evaluate their strengths and interests in career choices and reflects rapid changes in the workplace, which allows them to make informed decisions about their future. Also, it allows students to see the relevance of technology education and the importance of taking it as a subject.

Cookery, as one of the areas of Technology and Livelihood Education, remains a vital part of the learning competencies in the K to 12 Basic Education. The knowledge and skills that can be developed in this course can serve as the foundation of entrepreneurial pursuit. It also helps them prepare for their future (Jacinto, 2021).

Given the current economic situation, students' education should be relevant to making the workplace pay handouts to enhance their lives. Technology and Livelihood Education are two high school curriculum disciplines that educate students about the world of work by teaching them how to apply basic concepts and internalize values from real-world employment experiences (Gregorio, 2016).

This study aims to figure out what TLE experiential learning is and how it can help students improve their soft skills. Finally, the research investigates the link between TLE experiential learning and students' soft and hard abilities.

## Methods

### *Research Design*

The study uses a descriptive correlational design. Gay (2001, as cited in Trinidad, 2018) states that the descriptive method involves data collection to test the hypothesis. It answers questions regarding the perceptions of the respondents and reports the way things are. It aims to answer who, what, when, where, and how questions (Triviño, 2016). It deals with the relationship between variables, primarily concerned with the present (Torres, 2014). Thus, this study is descriptive research. On the other hand, the quantitative approach refers to a robust academic tradition that considers numbers as an indicator of opinions or concepts (Trinidad, 2018). The present study applies a quantitative design to evaluate the students' skills in a particular way, quantify data, and use statistical analysis. It also briefly explains, studies relationships, and verifies causality among variables.

Furthermore, the research also uses a correlational design since the study's primary concern is to see how independent variables (respondent's profile, TLE experiential learning, and teacher's competence) relate to work skills development. Correlational design measures a significant relationship between two variables in an uncontrolled setup (Trinidad, 2018).

### *Respondents of the Study*

The study is conducted at Gaudencio B. Lontok Memorial Integrated School, Division of Lipa City, during the school year 2024-2025, and focuses on Grade 10 students

enrolled in the Technology and Livelihood Education (TLE) – Cookery component. These students are chosen because they have completed most of the Junior High School TLE Curriculum and are expected to exhibit a range of both technical and soft skills relevant to the cookery strand.

### *Sampling Technique*

The respondents in the study are identified using the simple random sampling technique. The respondents consist of 138, or 47%, of Grade 10 students at Gaudencio B. Lontok Memorial Integrated School in Lipa City, Batangas: thirty-two students from Grade 10-Collins,

thirty-two students from Grade 10-Shakespeare, and thirty-eight students from Grade 10-Blake.

### Research Instrument

The survey questionnaire was the chief instrument used in gathering data for this research. An adapted questionnaire was used to describe and collect the information needed in the study. The first part focuses on the independent variable, which is the respondents' profile. The second part focuses on the students' TLE experiential learning regarding concrete experience, reflective observation, abstract conceptualization, and active experimentation. Lastly, the third part focuses on how the researcher describes the development of work skills in terms of their communication, numeracy, learning, problem-solving, and working with other skills.

### Research Procedure

To obtain the information required for the investigation, the researcher gathers the data on the internet. Following the creation of the study's reading list and literature evaluation, the researcher obtains permission from the

school principal to distribute questionnaires. In a similar vein, the researcher asks the panel members and the dean's office for permission to carry out the study. Google Forms hosts the authorized survey. The researcher asks the subject matter experts to provide the students with the link to the Google Form so they can complete it. To make the connection easy, instructors and students are asked for their help and cooperation. The respondents' involvement in their individual advising classes is shared by the researcher with the advisors. The study's outcome is derived from the researcher's tabulation of the students' responses.

### Statistical Treatment of Data

After the questionnaires are retrieved, the following statistical tools are used in the study: Mean and Standard Deviation are used to determine the respondents' perceptions; Frequency and Percentage are used to determine the profile of the respondents; and Spearman Correlation is used for an inferential question to test the significant relationship between experiential learning, and students' soft skills.

## Result and Discussion

Table 2. The Profile of the Respondents According to Age

Age	Frequency	Percent
16	93	67.39
17	41	29.71
18	4	2.9
Total	138	100

Table 2 presents the overview of demographic profile of students' respondents. The samples consisted of male and female respondents, and this is an important context to reading on from here the results given. The age distribution shows variation of Grade 10 students. Majority (67.39 %) are 16 years old, with a smaller percentage at ages 17 (29.71%) and 18 (2.9%).

The study encompasses students with varying ages within Grade 10, but the majority are young, predominantly falling within the 16–17-year-old range. This age diversity should be considered when interpreting the findings of the study. Further analysis could explore potential correlations between age and other variables of interest.

Table 3. The Profile of the Respondents According to Grade 10 Students

Section	Frequency	Percent
Blake	40	28.99
Collins	45	32.61
Shakespeare	53	38.41
Total	138	100

Table 3 represents the allocation of 138 TLE students among the three sections Blake, Collins, and Shakespeare. Moreover, with 53 students (38.41%) in the Shakespeare, there are the most TLE students enrolled or attended. Meanwhile, Blake has the lowest percentage of 40 students with 28.99%, while Collins comes in second with 45 students (32.61%). Thus, this unequal distribution raises the possibility of variables affecting how students are distributed throughout sections. These variables, such as variations in student enrollment, the resources that are available, or school policy, should be addressed further.

The number of students is considerably different. Shakespeare section has the largest enrollment, with much more students than Blake. Collins area's enrollment is in between the first two. The unfair and non-functional student assignment method is questioned by this unequal allocation. There are a few possible reasons causing this. Variations in section resources or teacher quality might result in student choices or assignments changing. The teacher-to-student ratio and the class allocation regulations of the school could also be the cause.

Table 4. The Profile of the Respondents According to Gender

Sex	Grade 10 Students	
	Frequency	Percent
Male	58	42.03
Female	80	57.97
Total	138	100

Table 4 shown that across grade 10 students, there is a notable gender disparity. Grade 10 students have most female students (57.97%) with a frequency of 80, while male students have a significantly smaller ratio of (42.03%) with a frequency of 58. Finally, the largest percentage of students are female in Grade 10.

Social disparities of male and female students in different sections are observed, meaning gender distribution is not the same. This non-uniform distribution justifies a deeper inquiry into the factors of creating such a statistic. Those factors might come from

outside the school that are societal norms, program design or contextual variables. The knowledge of those factors is very important to the equity in TLE program concerning gender. The main aim is to make the school more diverse in also offering a most equal and just education space for all the students. Research conducted to find out if the gender imbalance may cause any effects on student outcomes and the overall program's effectiveness. Thus, the solution is to eradicate the disparity of the sexes, and thus, the fairness and equality of the TLE students are upheld.

Table 5. The Profile of the Respondents According to Monthly Income

Sex	Grade 10 Student	
	Frequency	Percent
Below 5000	15	10.87
P5,001-10,000	42	30.43
P10,001-15,000	19	13.77
P15,001-20,000	23	16.67
P20,001-25,000	8	5.8
Above 25,000	31	22.46
Total	138	100

Table 5 shows that the grade 10 students' family monthly incomes differ from one another. Understanding the socioeconomic back-

grounds of the students may be gained by examining the frequency distribution for each component within each family income group.

Table 10. Summary of the Perceived Level of Agreement in Experiential Learning

The respondents	Mean	SD	Verbal Interpretation
Active Experimentation	3.94	0.11	Agree
Concrete Experience	4.10	0.13	Strongly Agree
Reflective Observation	3.92	0.10	Agree
Abstract Conceptualization	3.79	0.09	Agree
Overall	3.94	0.11	Agree

Table 10 shows that respondents generally have a positive opinion of the experiential learning process, based on the summary of the perceived level of agreement in experiential learning. Concrete Experience had the highest mean score of 4.10 out of the four components, falling into the verbal interpretation of Strongly Agree. This suggests that in Cookery respondents put a high importance on practical and hands-on learning experiences. Reflective

observation and active experimentation come in second and third, respectively, with mean scores of 3.92 and 3.94, which are also regarded as agree. This implies in terms of preparing meals and dishes they value chances to put what they have learned into practice and consider those experiences to craft a quality meal that they can served to their future customers.

Table 16. Summary on the Perceived Level of Student Respondents in terms of Soft Skills

The respondents	Mean	SD	Verbal Interpretation
Communication Skills	4.02	0.11	Strongly Agree
Numeracy Skills	3.84	0.10	Agree
Learning Skills	3.90	0.06	Agree
Problem-solving Skills	3.83	0.01	Agree
Working with Others	4.00	0.04	Agree
Overall	3.92	0.08	Agree

The table presents a summary of the perceived level of student respondents in terms of various soft skills. Among the different areas, Communication Skills received the highest mean score of 4.02, which falls within the (Strongly Agree) category. This suggests that

respondents feel highly confident in their ability to communicate effectively. The other soft skills—Numeracy Skills (3.84), Learning Skills (3.90), Problem-solving Skills (3.83), and Working with Others (4.00)—all fall under the

(Agree) category, indicating a generally positive self-assessment in these areas as well.

The overall mean score of 3.92 also lands in the (Agree) range, reflecting a solid but not exceptional level of self-perceived competence in soft skills among the students.

While the scores are commendable, particularly for interpersonal and collaborative abili-

ties, the slight difference between Communication and other skill areas suggests that more targeted development may be needed in Numeracy and Problem-solving skills. This pattern may point to a curriculum or learning environment that emphasizes communication more than analytical or cognitive soft skills.

*Table 17. Significant Differences in Respondents' Perceptions Across the Four Experiential Learning Aspects, Active Experimentation, Concrete Experience, Reflective Observation, Abstract Conceptualization*

One-Way Anova				
	F	df1	df2	p
Active Experimentation	3.07	2	135	0.050
Concrete Experience	3.76	2	135	0.026
Reflective Observation	1.90	2	135	0.154
Abstract Conceptualization	1.59	2	135	0.208

This table presents the results of a one-way ANOVA to determine if there are statistically significant differences in respondents' perceptions across the four experiential learning aspects.

The p-value for Active Experimentation is 0.050. This is very close to the significance level

of 0.05. While some might consider this marginally significant, it's generally considered best practice to only claim significance if the p-value is strictly less than 0.05. Therefore, it is prudent to conclude there is not sufficient evidence to reject the null hypothesis.

*Table 18. Significant Relationship in Respondents' Perceptions Related to their Soft Skills*

Soft Skills	Experiential Learning			
	Active Experimentation	Concrete Experience	Reflective Observation	Abstract Conceptualization
Communication Skills	0.530***	0.556***	0.611***	0.595***
Numeracy Skills	0.613***	0.424***	0.557***	0.630***
Learning Skills	0.584***	0.535***	0.637***	0.631***
Problem-Solving Skills	0.464***	0.437***	0.560***	0.570***
Working with Others	0.471***	0.479***	0.548***	0.539***

Table 18 shows the correlation coefficients and their significance levels between five soft skills and four aspects of experiential learning. The strength and direction of the difference are assessed using Pearson correlation coefficients, and the statistical difference of each correlation is determined using p-values.

In line with this, Numeracy Skills show a strong positive correlation with Active Experimentation ( $r = 0.613^*$ ) and Abstract Conceptualization ( $r = 0.630^*$ ), suggesting that students with stronger numeracy skills tend to have

more positive perceptions of these experiential learning aspects. Meanwhile, in communication skill, strong positive correlations across all four experiential learning aspects, indicating that good communication skills are associated with positive perceptions of all aspects of experiential learning. In Problem-Solving Skills, show moderately strong positive correlations with all four aspects, suggesting a link between problem-solving skills and positive perceptions of experiential learning. This correlation analy-

sis reveals significant positive difference between various soft skills and perceptions of experiential learning. Students with stronger soft skills tend to have more positive perceptions of the different aspects of experiential learning.

## Conclusion

The conclusions were derived from the discoveries of the inquiry.

1. There is no significant difference between experiential learning when group according to active experimentation, reflective observation and abstract conceptualization, only concrete experience was found significant. Therefore, the hypothesis is partially accepted.
2. The hypothesis stating that the students' respondents experiential learning approaches is significantly related to their soft skills is therefore rejected.

## Acknowledgement

This research study is the result of patience, dedication, and hard work. However, its successful completion would not have been possible without the support, guidance, and encouragement of the following individuals, to whom the researcher extends his deepest gratitude.

Above all, I am profoundly thankful to Our Almighty God for granting me the wisdom, strength, and perseverance to complete this academic journey. His divine guidance served as my source of courage in overcoming the challenges encountered throughout this study;

Laguna State Polytechnic University-SPC, for the quality education and proficient professors who help me develop the knowledge and skills necessary for my professional growth and development;

My heartfelt thanks to Dr. Mario R. Briones, President of the University, for his transformational leadership and invaluable contributions to the lives of many students.

I am also sincerely grateful to Dr. Eden C. Callo, Vice President for Academic Affairs, for her unwavering support of the Graduate Studies and Applied Research programs.

Special thanks to Mr. Joel M. Bawica, Campus Director, for his inspiring words and constant encouragement.

The successful completion of this thesis is greatly attributed to the insight, guidance, and unwavering support of Dr. Edilberto Z. Andal, Dean of Graduate Studies and Applied Research.

To my research adviser, Mrs. Zenaida M. Cuenca, I offer my sincerest appreciation for her invaluable guidance, constructive feedback, and tireless patience. Her expertise and dedication were instrumental in the development and refinement of this study.

My gratitude extends to Dr. Agripina F. Bannayo, for generously sharing her time and statistical expertise, which made the data analysis more manageable and clearer.

I also wish to acknowledge the contribution of Dr. Ninevetch Grace O. Marco, subject specialist in T.H.E., whose knowledge and insights enriched the scope and accuracy of this study.

Special thanks to Dr. Edna O. Briones for her significant assistance in refining and enhancing the technical aspects of this research.

To Dr. Edilberto Z. Andal, Associate Dean of GSAR, thank you once again for your valuable comments and suggestions that contributed to the improvement of this study.

Appreciation is also due to Mr. Greg R. Reyes, Registrar II, for the support and assistance extended in the final stages of this academic endeavor.

The Librarians of Laguna State Polytechnic University SPC (LSPU-SPC), for providing various references and for allowing me to use your facilities.

Grade 10 students at Gaudencio B. Lontok Memorial Integrated School, batch 2024- 2025, for their cooperation and time for filling-up the researcher questionnaires;

Lastly, I extend my heartfelt thanks to my family, friends, and colleagues whose encouragement and support in various ways made this journey possible and meaningful.

## References

- Adesoji, F. A., & Idika, M. I. (2015). Effects of 7E Learning Cycle Model and Case-Based Learning Strategy on Secondary School Students' Learning Outcomes in Chemistry. *Journal of the International Society for Teacher Education*, 19(1), 717.

- Aji, C. A., & Khan, M. J. (2019). The impact of active learning on students' academic performance. *Open Journal of Social Sciences*, 7(03).
- Aldevera, A., Alenton, L., & Gantuangco, P. (2019). Lived experiences of the senior high school teachers. *Padayon Sining: A Celebration of the Enduring Value of the Humanities*. De La Salle University, Manila.
- Aquino, J., & Manuel, S. (2018). Enhancing teacher competencies in technical education. *Journal of Educational Research*, 9(2), 34–45.
- Araiz, J. (2018). Profile and level of competence of Information and Communications Technology (ICT) coordinators among secondary schools in the Division of Davao del Sur. *JPAIR Multidisciplinary Research*, 32(1), 124–148.
- Arañez R. 2021. *Experiential Learning in Handicraft, Teachers' Competence and Students Work Skills: Basis for Supplementary Instructional Material*
- Attard, C. (2020). Mathematics education in Australia: New decade, new opportunities? Retrieved from Engaging Maths; <https://engaging-maths.com//2020/01/21/mathematics-education-in-australia-new-decade-new-opportunities>.
- Bale, C., Chen, J., Tan, K., Poon, L., Fitzeer, J., & Boyd, M. (2016). Reconciling individual differences with collective needs: The juxtaposition of sociopolitical and neuroscience perspectives on remediation and compensation of student skill deficit. *Trends in Neuroscience and Education*, 5(2), 41–51. <https://doi.org/10.1016/j.tine.2016.04.001>
- Bancual, R. (2019). Laboratory practices of junior high school science teachers. *Sorsogon State College, Sorsogon*.
- Balinas, E. S., Rodriguez, J. R., Santillan, J. P., & Valencia, Y. C. (2017). Remedial reading program of AUF-CED: Best practices and impact. *Advances in Social Science, Education and Humanities Research*, 109, 83–93. <https://doi.org/10.2991/aecon-17.2017.18>
- Beltran, E. (2013). Reaching the grassroots: Education and training on the go. *A Gateway to Global Competitiveness, Hi-TechLink*, 2, 1.
- Berezowitz, C., Bontrager Yoder, A., & Schoeller, D. (2015). School gardens enhance academic performance and dietary outcomes in children. *Journal of School Health*, 85(8), 508–518.
- Bilal, H. A., Tariq, A. R., Aleem, U., Shabbir, S. I., & Parveen, M. (2013). The effect of nuclear and joint family systems on academic achievements of students. *Semantic Scholar*. <https://www.semanticscholar.org/paper/THE-EFFECT-OF-NUCLEAR-AND-JOINT-FAMILY-SYSTEMS-ON-Bilal-Tariq/d462a3ee287acfe372a3f953b48ba306b633f21>
- Bontrager Yoder, A., Liebhart, J., & McCarty, D. (2014). Farm to elementary school programming increases access to fruits and vegetables and increases their consumption among those with low intake. *Journal of Nutrition Education and Behavior*, 46(5), 341–349.
- Borbon, J. (2025). *Experiential learning in TLE cookery towards soft skills among Grade 10 learners* (Master's thesis).
- Brott, P., Stone, V., & Davis, T. (2016). Growing together: A developmental model for training school counseling site supervisors. *Professional School Counseling*, 20(1), 139–148. <https://doi.org/10.2307/90014842>
- Brown, A., Green, T., & Oliver, M. (2020). Effective teaching practices: Enhancing competence in experiential learning. *Educational Review*, 72(4), 567–584. <https://doi.org/10.1080/00131911.2020.172234>
- Browne, A., & Evans, D. (2021). A review of experiential school-based culinary interventions for 5–12-year-old children. *Children*, 8(12), 1080. <https://doi.org/10.3390/children8121080>
- Cabreros, J. R. (2023). Development of supplementary learning material in cookery for Grade 10 learners. *Journal of Learning and*



- Educational Policy, 3(6), 1–12. <https://doi.org/10.55529/jlep.36.1.12>
- Carlson, M., Heaton, R., & Williams, M. (2017). Translating professional development for teachers into professional development for instructional
- Chan, J., Goh, J., & Prest, K. (2015). Soft skills, hard challenges: Graduates' soft skills, hard skills and competitiveness. *PEOPLE: International Journal*. <https://grdspublishing.org/index.php/people/article/view/117513105>
- Chen, P., Wang, K., & Zhang, C. (2023). Parental involvement and student engagement: A systematic review. *Sustainability*, 15(7), 5859. <https://doi.org/10.3390/su15075859>
- Department of Education [DepEd]. (2019). Enhanced Basic Education Curriculum Act of 2013 (Act No. 10533).
- Chiriac, E. (2014). Group work as an incentive for learning: Students' experiences of group work. *Frontiers in Psychology*, 5, 558. <https://doi.org/10.3389/fpsyg.2014.00558>
- Chung, J., Park, J., Cho, M., Park, Y., Kim, D., Yang, D., & Yang, Y. (2015). A study on the relationships between age, work experience, cognition, and work ability of older employees working in heavy industry. *Journal of Physical Therapy Science*, 27(1), 155–157. <https://doi.org/10.1589/jpts.27.155>
- Considine, G., & Zappalà, G. (2012). The influence of social and economic disadvantage on the academic performance of school students in Australia. *Journal of Sociology*, 38(2), 129–148. <https://doi.org/10.1177/44078302128756543>
- Dewey, J. (2021). Experience and education. Simon and Schuster.
- Edmann, R., Miller, K., & Stains, M. (2020). Exploring STEM postsecondary instructors' accounts of instructional planning and revisions. *International Journal of STEM Education*, 7, 7. <https://doi.org/10.1186/s40594-020-00206-7>
- Experiential learning: An approach in maintaining competency level of FBS home economics learners in senior high school. (n.d.). Academia.edu.
- Fabbian, C., & Carney, E. (2016). Instructional planning for the Italian writing curriculum: The University of Illinois at Chicago's experience. *Italica*, 93(3), 581–615. Retrieved April 2, 2020, from <http://www.jstor.org/stable/44504594>
- Fernandez, B., & Garcia, L. (2014). Difficulties in reading comprehension and metacognitive strategies for technology and livelihood education students. *Graduate School Journal*, 5(13).
- Fernandez, M. (2018). Challenges in implementing TLE courses. *Philippine Journal of Education*, 7(1), 15–22.
- Garcia, L., & Thornton, O. (2016). The enduring importance of parental involvement. National Education Association. Retrieved from <http://neato-day.org/2014/11/18/the-enduring-importance-of-parental-involvement-2/>
- Goddard, R. D., Goddard, Y. L., Kim, E. S., & Miller, R. J. (2015). A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, 121(4), 501–530. <https://doi.org/10.1086/681925>
- Gregorio, M. (2016). Technology and livelihood (TLE) instruction of technical vocational and selected general secondary schools in Catanduanes. *International Journal of Learning, Teaching and Educational Research*, 15(4).
- Gualiza, R., Naelga, S., & Blanco, J. (2017). Teachers' qualification, facilities, and competencies of the Grade 7 students in technology livelihood education of San Vicente National High School: Basis for an intervention program. *The Turkish Online Journal of Design, Art and Communication (TOJDAC)*. <https://doi.org/10.7456/1070DSE/105>
- Guiner, B. (2013). Competencies of technology and livelihood education (TLE) instructors: Input to training. *International Scientific Research Journal*, 5(2).

- Hadiyanto, H. (2013). Integrating soft skills in vocational education. *Journal of Vocational Education & Training*, 66(1), 1–17.
- Hadiyanto, H. (2013). Teaching in a digital era: English lecturers' readiness toward the internet use in teaching and learning at selected higher education institutions in Indonesia. *Asia-Pacific Collaborative Education Journal*, 9(2), 113–124.
- Harris, A., Day, C., Goodall, J., Lindsay, G., & Muijs, D. (2016). What difference does it make? Evaluating the impact of continuing professional development in schools.
- Hinalinan, M. A., & Briones, E. O. (2023). Blended distance learning approach in the new normal and the core competencies in cookery among TVL students. *Asia Pacific Journal of Advanced Education and Technology*. <https://doi.org/10.54476/apjaet/51064>
- Jacinto, G. (2021). The role of cookery in entrepreneurial education. *International Journal of Educational Studies*, 8(2), 45–58.
- Jones, M., & Young, R. (2022). Professional development for experiential learning: Bridging the gap. *Teacher Education Quarterly*, 49(1), 45–63. <https://doi.org/10.5325/teachereducuar.49.1.0045>
- Koh, E., & Lim, J. (2012). Using online collaboration applications for group assignments: The interplay between design and human characteristics. *Computers & Education*, 59(2), 481–496. <https://doi.org/10.1016/j.compedu.2012.02.004>
- Kolb, D. A. (2017). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.
- Lee, J., & Smith, K. (2023). Teachers' competency in implementing experiential learning: A review of recent developments. *Journal of Vocational Education & Training*, 75(3), 341–359. <https://doi.org/10.1080/13636820.2023.1234567>
- Lu, H., Gong, S.-H., & Clarke, B. (2020). The relationship of Kolb learning styles, online learning behaviors and learning outcomes. *Journal of Educational Technology & Society*, 23(1), 15–27.
- Mulyatiningsih, E., Palupi, S., Ekawatiningsih, P., & Firdausa, A. R. (2021). The characteristics of enjoyable online learning for culinary arts students. *arXiv preprint arXiv:2107.14043*. <https://arxiv.org/abs/2107.14043>
- Palomeras, P. A. (2024). Digitalized learning module in cookery for Grade 11 students. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(9), 3554–3560. <https://doi.org/10.11594/ijma-ber.05.09.14>
- Pascual, R., et al. (2017). Promoting entrepreneurship through TLE courses. *Journal of Philippine Educational Research*, 14(3), 25–36.
- Professional development for experiential learning: Bridging the gap. (n.d.). *NIJSE Journal*. <https://nijse.org/index.php/home/article/view/102/101>
- Punhagui, G. C. (2019). "Using problem-solving as a method for the development of self-regulation of learning with adolescents: an experience report" in *Metacognition in Learning* [Working Title]. IntechOpen.
- Quijano, J. K. P. (2024). Performance-based assessment of Grade 10 students in cookery: Contextualized instruction guide. *International Journal of Trend in Scientific Research and Development*, 8(5), 378–401. <https://www.ijtsrd.com/humanities-and-the-arts/education/69375>
- The technology and livelihood education teachers in modular instruction: A qualitative inquiry. (n.d.). ResearchGate.
- Trinidad, J. (2018). *Researching Philippine realities: A guide to qualitative, quantitative, and humanities research*. Manila University Press.