

TECHNICAL VOCATIONAL EDUCATION IN THE CONTEXT OF GLOBALIZATION: ITS PEDAGOGY AND STRATEGIES

ABSTRACT

Aims: The aim of this study was to determine the personal experiences of the teacher-participants in the teaching of Technology and Livelihood Education. It also ascertained and met the following objectives: 1) determine the teaching experiences of the TLE teachers; 2) to identify the training needs of TLE teachers; 3) ascertain the challenges faced by the TLE teachers; 3) discover the pedagogy and strategies used by the TLE teachers; and 4) find out the recommendations of the TLE teachers to improve the delivery of the course.

Study design: Qualitative-phenomenological approach.

Place and Duration of Study: The study was conducted in Sta Cruz National High School, Sta. Cruz, Davao del Sur. The study was conducted for 6 months.

Methodology: The researchers purposely chose all the Technology and Livelihood Education (TLE) teachers. The information were gathered through Focus Group Discussion (FGD).

Results: Six themes emerged from the data analysis. Generally, the teacher-participants found teaching of TLE subject was challenging because the activities were focused on exploration. Moreover, they felt satisfied because they were able to share their knowledge and skills to their students. It implies that the TLE teachers were committed and dedicated to their jobs despite the difficulties they encountered. However, the teacher-participants revealed that generally, they were not sent outside of the school to attend training-seminar for skills enhancement. It is an indication that the school heads lack concern for their teachers' professional development. In addressing the challenges of the teachers, they collaborate with each other by sharing their resources. Despite the challenges they encountered, they were still optimistic to be globally competitive. It implies that the TLE teachers do not give up easily. They suggested that the school administration needed to develop the participants' personal character so that their teaching goals were met.

Conclusion: The TLE teachers loved and enjoyed their teaching jobs despite the challenges they faced. However, they clamored to the Department of Education (DepEd) to address their needs such as sending them to trainings and seminar-workshop to enhance their skills and capabilities. To show their dedication to their jobs, they brought their own tools and shared the same to other teachers. Notably, the participants only used three teaching strategies. It shows that TLE teachers lack the knowledge of other teaching strategies. The participants were optimistic that sooner or later their TLE programs are accredited and recognized locally and internationally. This implies that the participants were committed to their jobs. Ironically, they suggested that improvement of the teachers' self was better than improving the TLE implementation. This shows that the teachers believed that materials can be easily acquired but not the attitude.

Keywords: Technical vocational education, globalization, pedagogy, strategies, Davao del Sur

1. INTRODUCTION

17 Globalization exists and affects the life and work of the people and the societies¹⁶.
18 Globalization is a force that changed the way how people and nations deal with one another
19 ⁸ particularly in the area of international commerce^{49,34}. Workers should be equipped with
20 different skills which are in demand by the current industries^{36,44}. These skills can be
21 achieved through enrolling the technical and vocational education which follows the
22 international standards of the industries.

23
24 This is now the challenge for the Technical Vocational Education or the Technology and
25 Livelihood Education teachers to transfer knowledge and skills to the students aligned with
26 the international standards and competencies of the different skills and specializations. The
27 Technology and Livelihood Education subject is composed of four (4) areas: Home
28 Economics, Industrial Arts, Information and Computer Technology and Agro-Fishery Arts.
29 This makes teaching TLE a challenging task. TLE teachers must be knowledgeable, skillful
30 and competent in demonstrating skills in any of the four TLE areas.

31 The challenges faced by the TVE/TLE teachers in teaching the 21st century learners in the
32 field of technology and livelihood are tremendous. It is expected that the learners would
33 develop their critical thinking, problem solving skills, and communication skills in the
34 classroom activities. TLE/TVE teachers must be good facilitators of learning and develop
35 knowledge and skills of the students through different laboratory activities which include
36 students' performance tasks and project making. There should be strategies of the teachers
37 which could help develop students' creativity, innovativeness and collaborative skills. The
38 use of the community as a laboratory for learning also develops students' 21st century skills
39 as well as the learners' awareness of their environment. However, TLE teachers have
40 difficulties in applying different strategies and transferring of skills to the students⁵⁵. Factors
41 which affect this problem are the shortage of skills, mismatch of teachers, and of lack of
42 materials²⁷. These problems are usually experienced in the implementation of a new
43 curriculum.

44 The Department of Education encourages the TVE/TLE teachers to undergo trainings and
45 gain skills in the different specializations. However, teachers have to spend their own
46 resources and voluntarily subjected themselves into NC II Assessments and Trainers'
47 Methodologies trainings in order for them to get the knowledge and skills needed. With the
48 knowledge and skills gained from the trainings and assessments, the teachers come up with
49 an effective pedagogy and strategies to transfer the knowledge and skills in order for their
50 students to become globally competitive.

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52 Thus, this study was conducted to determine the experiences of the TLE teachers in
53 teaching the TLE subjects. Moreover, it also looked into the strategies used by the TLE
54 teachers in delivering their lessons in the context of globalization. Likewise, it identified the
55 teachers' faced challenges and culled recommendations to improve their teaching. This
56 study was relevant because only few studies which dealt with the TLE because it was a new
57 curriculum of the K-12 program. Thus, this study can contribute in the improvement and
58 development of the TLE program.

59 60 **1.1 Research Questions**

61 The general aim of this study was to determine the personal experiences of the teacher-
62 participants in the teaching of TLE. Particularly, it ascertains to meet the following objectives:

- 63 1. To determine the teaching experiences of the TLE teachers;
- 64 2. To identify the training needs of TLE teachers;
- 65 3. To ascertain the challenges faced by the TLE teachers;
- 66 4. To discover the pedagogy and strategies used by the TLE teachers; and
- 67 5. To find out the recommendations of the TLE teachers to improve the delivery of the
68 course.

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1.2 Significance of the Study

The following are the beneficiaries of the study:

School Administrators. The results of the study will guide school administrators on the conditions of the TLE teachers; thus, initiate programs to address the technical and professional needs of the teachers.

TLE Teachers. The results of the study will help TLE teachers to determine what other pedagogy and strategies can be used in order to enhance the technical skills of the students. Moreover, the results may become their evidence to suggest for relevant innovations for TLE.

Students of TLE. The results of this study may give the student hints to the real situations of the TLE teachers; thus, suggest relevant ideas on what strategies best for them.

1.3. Scope and Delimitation

The focus of this study was on the experiences of the teachers handling different specializations in TVE/TLE such as Agro-fishery Arts, Industrial Arts, Information and Communication Technology and Home Economics. It did not include other subject teachers. Additionally, this study was conducted in different Junior and Senior High Schools in Davao del Sur. Moreover, the study used the qualitative method; hence, only limited number of participants was involved. According to ^{42, 1}, a study cannot make generalization of results if the number of participants is not statistically viable. Thus, the results may only be applied to the actual population included in the sampling frame. For ¹⁰, because of number-limitation, the study can't offer recommendations, rather an implication.

1.4 Definition of Terms

The following terms used in this study were defined for better understanding of concepts.

Technical Vocational Education (TLE). This pertains to the program offered in Junior High Schools under the K-12 program. This program has four components, Agri-Fishery Arts, Home Economics, and Industrial.

Technical Vocational Education Teachers. These are individuals who are assigned to teach the TLE courses in the Junior or Senior High Schools.

Globalization. This refers to the intensification of cross-area and cross-border social relations ⁴³; an institutionalized cultural account which describe reality and makes sense about how the world works ⁵³; a process of greater integration within the world economy through movements of goods and services, capital, technology and labor, including education, which lead to increase economic decisions being influenced by global conditions ²².

Pedagogy. This pertains to a theory on teaching/learning process that guides the teachers' choice of classroom practices by providing criteria to evaluate specific educational strategies and techniques in terms of the desired course outcomes ⁴⁵. It proposed that students expect to learn something generalizable contexts instead of just become informed of facts ⁹.

Teaching Strategies. In general sense, these are approaches and techniques used by teachers to motivate and engage students ²⁶. In a deeper and specific sense, ⁴⁰ cite that teaching strategies may differ depending on the teachers' pedagogical orientation. Thus, a teacher may base his / her strategies on formal, descriptive, and normative theories of teaching.

2. MATERIAL AND METHODS / EXPERIMENTAL DETAILS / METHODOLOGY

122 **2.1 Research Design**

123 This study used the qualitative-phenomenological approach. According to ²⁸, qualitative
124 method is used when investigation needs to know the participants' opinions. Likewise, it is
125 also used when a study tries to understand individuals' personal encounter of an experience
126 ⁵¹. Moreover, ⁴¹ say that qualitative method is essentially relevant if the study aims to
127 determine the importance of the individual's lived experiences. On the other hand, ⁷
128 mentions that qualitative method is best when a study needs personal narration and
129 reflection of lived experience. On the other hand, phenomenological approach focuses on
130 the experience-based design ²⁴. The use of focus group allows individual who have similar
131 experiences to be together ³⁵; it is an effective mechanism to generate understanding and
132 gain insight of the participants ²⁰. In this investigation, the individuals' lived experiences of
133 the TLE teachers were in focus. They were formed into group and in turn shared their
134 experiences.

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136 **2.2 Locale of the Study**

137 The study was conducted in the public secondary schools in Sta. Cruz, Davao del Sur.
138 Particularly in Sta Cruz National High School. It is located specifically located at Camposo
139 Road, Poblacion, Sta. Cruz. Moreover, it is a Department of Education manage partially
140 urban secondary public school.

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142 **2.3 Sampling Procedure**

143 This qualitative-phenomenological study used the non-probability sampling method in
144 selecting the teacher-participants. The researchers purposely chose all the TLE teachers of
145 Sta. Cruz National High School, Davao del Sur. They were selected because they were the
146 individuals who had the knowledge about the topic under study. ¹⁵ avers that purposive
147 sampling allows the selection of participants who are most suitable to pre-determined criteria
148 set by the researchers. In same vain, ¹⁴ point out that purposive sampling is usually used by
149 researcher if they have in mind and participants who suit the purpose of the study.

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151 **2.4 Research Instrument**

152 The research instrument used in this study was a researchers-made interview guide
153 questionnaire. The questions and probe-questions were based on the research questions.
154 The interview-guide questions were validated by experts. This was done to assess and
155 shape its contents ¹⁷; determine its reliability ³⁹; ascertain its outcome efficiency ⁵⁶. The
156 researchers were convinced that validating the interview guide-questions gave them the
157 opportunity to polish thoroughly the questions for its purpose.

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159 **2.5 Data Collection Procedures**

160 Observation of proper data collection procedures allows the attainment of reliability and
161 transparency ³⁸. It also permits a systematic conduct of the study ⁴. In this study, three steps
162 were followed.

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164 Preliminary Stage. During this stage, the researchers got the approval to conduct the study
165 through a formal letter. After the permission was obtained, formal letters of invitations were
166 also sent to the different TLE teachers. Moreover, it was during this stage when the research
167 questions, together with the interview guide questionnaire, were composed and subjected to
168 validation.

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170 Data Collection Preparation Stage. At this stage, the focus group discussion was conducted.
171 During the interview, the researchers allowed all participants to talk and disallowing
172 manipulation of answers. With permission from the participants, the interview proceedings
173 were recorded. After the focus group interview, the researchers transcribe the proceedings.

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175 Data Analysis Stage. At this phase, the thematic analysis of information was conducted. In
176 the analysis, data analyst involved memoing, coding, and thematic analysis. Then, patterns
177 of responses were formulated into themes.

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179 **2.6 Trustworthiness of the Study**

180 In handling the issues of trustworthiness ¹¹ of this research, the researchers observed four
181 essential procedures in order that gathered information to be reliable. These included
182 credibility, transferability, dependability, and confirmability. ³¹ explained that credibility is
183 established when there is a prolonged engagement between the participants and the
184 researchers. In this study, this was not an issue because all the participants, the participants
185 and researcher were all DepEd teachers and they have known each other for some time.
186 Animosity among the participants was not an issue because they already built trust with
187 each other. Thus, the researchers were confident because the atmosphere of easiness with
188 the participants was established.

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190 On the other hand, ³² said that transferability is obtained when the results of the study will be
191 utilized by other researchers in their search for clarifications; and degree in which the
192 research can be transferred to other contexts. This particular aspect was realized in this
193 study because its result would give essential insights to the school heads, readers and
194 researchers information on the reality of TLE programs. Moreover, transferability is
195 addressed when the researchers make specific details of the situations and methods which
196 readers can compare to similar situation that they have knowledge about.

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198 The concept of dependability is based on the assumption of replicability or repeatability of
199 the study ^{12,17}. The researchers observed this aspect by strictly following the standard in the
200 conduct of research. The researchers subjected the research questions to experts' validation
201 for validity and reliability. Likewise, enough related studies were provided in all areas of this
202 study to strengthen the results and claims. Lastly, confirmability refers to the authenticity of
203 the results which could be verified by others ⁴⁹. This aspect was established in this research
204 through the thematic analysis of information. The thematic analysis of data applied
205 memoing, coding, and vertical and horizontal procedures. Further, recordings and transcripts
206 of the gathered information were available upon the request of the readers.

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208 **2.7 Data Analysis**

209 After the recorded interview was transcribed, the researchers gave the same to a data
210 analyst. In the process of data analysis, the analyst applied memoing thru vertical analysis,
211 coding thru horizontal analysis, and thematic analysis thru looking for patterns. ⁵ mention that
212 memoing is used to assist in making the conceptual leaps from the raw data. Moreover, ⁵⁶
213 points out that memoing is used to make reflections on the data under analysis. Likewise,
214 coding is conducted to facilitate the process of reading to create a storyline; to categorize the
215 information into codes; and to clarify and interpret the information ⁴⁶. Finally, thematic
216 analysis is used to look for patterns in the responses of the participants ⁶ and identifying
217 meaning ²². The results of the analyses were put into table indicating the themes, frequency
218 of responses, and core ideas.

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220 **3. RESULTS AND DISCUSSION**

221 Shown below are the results of the focus group conducted among the TLE teachers of
222 various educational backgrounds. ³² argue that in presenting qualitative information, a table
223 may be provided although its use is still debated. However, ¹⁰ mentions that qualitative
224 research has the prerogative to decide on the format. Thus, in the presentation of the results
225 of this study, a table is used for better and easy understanding. Moreover, in classifying the
226 information obtained, the frequency is considered *General* if the responses have 50% of

227 more recurrence; *Typical* if there is 21-49% reactions specified in the interview; and *Variant*
 228 if the reactions' occurrence is 20% less.

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Table 1. Themes and Core Ideas on TLE Pedagogical Strategies

Themes	Frequency of Response	Core Ideas
Perceptions on teaching	General	- challenging because it focuses on exploration - enjoying to share knowledge to students
Professional growth attended	General Variant	- having no training attended - spending personal money - schooling through scholarship
Handling difficulties in teaching	Typical Variant	- collaborating with other TVE teachers - bringing own tools - using video clips - reading food magazines
Methodologies used in teaching	Variant	- cooperative learning - demonstrating to students - using independent learning
Aspiration for certification	General	- aiming to be globally competitive
Recommendations for improvement	General	- developing teachers' personal character

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232 3.1 Perceptions on teaching

233 Generally, the teacher-participants considered the teaching of TLE was challenging. It was
 234 so because the activities were focused on exploration. Moreover, they also felt satisfied
 235 because they were able to share their knowledge and skills to their students. This implies
 236 that the TLE teachers were committed and dedicated to their jobs despite the difficulties they
 237 encountered. Moreover, these teachers were most likely oriented of the tasks assigned to
 238 them. ³ mention that TLE teachers understand their roles which are to improve teaching and
 239 learning strategies, develop TLE students' competencies, and meet the industry
 240 requirements.

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242 3.2 Professional growth attended

243 It was a sad revelation that generally, the teacher-participants hadn't attended training-
 244 seminar which could enhance their skills. It is an indication that the school heads lack
 245 concern on his/her teachers' professional development. Variantly, it was also revealed that
 246 the teachers used their own money to finance their attendance to trainings. This implies that
 247 their schools have no budget for their teachers' skills development. Hence, other teachers
 248 looked for scholarships. ³⁶ mentions that TLE training has always been the issue not only in
 249 Indonesia but also in other ASEAN member countries. In the same vain, ^{32, 2} point out that
 250 teachers' re-training programs are essential to improve and develop not only their
 251 performance skills and knowledge but also their abilities to make teaching and learning
 252 effective.

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254 3.3 Handling difficulties in teaching

255 In addressing the challenges of the teachers, they collaborate with each other by sharing
 256 resources. Variantly, some teachers brought their tools at school because the school didn't
 257 have materials. Moreover, teachers used video clips so that students could better
 258 understand the concepts. Other teachers used food magazines because these reading
 259 materials had colorful illustrations. ⁵⁹ that aside from other challenges encounter by the TLE

260 teachers, they also face the limited numbers of teaching facilities; ⁵¹ also points out that
261 generally, teachers in developing countries needs to deal with the lack of necessary
262 laboratories where they can conduct their TLE classes. ⁴⁷ also mentions that available TLE
263 materials are outdated and lack maintenance. This implies that the TLE implementation is
264 not thoroughly planned because of the inadequacies of necessary materials for the
265 realization of its goals.

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267 **3.4 Methodologies used in teaching**

268 In delivering the concepts to the students, teacher used various methods. One of these was
269 cooperative learning, demonstration, and independent learning. In cooperative learning,
270 students were formed in a group so that they collectively work the task given. Usually in
271 cooperative learning, the group chose its leader who steered the group. On the other hand,
272 in demonstration, the teacher followed the modeling approach where he or she performed
273 the task first for the students to follow. The focus of this approach was on the process on
274 how something was to be done appropriately. Thus, students learn the skill. Lastly, teachers
275 allowed the students to have independent learning which aimed at allowing the students to
276 constructively discover knowledge and skills on their own way. ²³ mention that TLE teachers
277 should emphasize the development of skills among students such as teamwork,
278 communication, and problem solving. On the other hand, ⁵⁷ assert that for the transfer of
279 ability to be successful, teachers should use metacognitive teaching strategy which includes
280 independent learning. By this, students learn to discover their technical skills.

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282 **3.5 Aspiration for certification**

283 Despite all the challenges the teachers were dealing with, the lack of technical trainings,
284 seminars, and the lack of materials, they were optimistic to be globally competitive. This
285 implies that the TLE teachers do not give up easily rather motivated. These teachers clamor
286 for certification because they wanted their TLE programs to be recognized, competitive, and
287 attractive. Certification of program implies quality ²⁷ and good management ⁴⁵. Thus,
288 certification is an important means of legitimizing the TLE as a good course to take.

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290 **3.6 Recommendations for improvement**

291 Interestingly, all the teachers' recommendation did not focus on addressing their needs
292 rather on developing their personal character so that their teaching goals were met.
293 According to ¹⁹ personal indicators such as expectations about the job became the reasons
294 some individuals look for to understand teachers' expectations. Moreover, ²⁸ say that making
295 learning personally meaningful comes from the constructivist perspective, which stresses
296 cooperation to accommodate the many time-constraints imposed by personal responsibilities
297 and commitments.

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299 **4. CONCLUSION**

300 Generally, the TLE teachers are enjoying their jobs despite the difficulties they faced.
301 However, this happiness may be short-lived if the Department of Education will remain
302 unmindful of the needs of TLE teachers. Moreover, the teacher-participants show their
303 dismay because they haven't been attended trainings to enrich their skills and to learn new
304 knowledge. Due to the lack of equipment and supplies, teachers bring their own tools and
305 share the same with others. It implies that the TVE program is implemented despite the
306 inadequacy of materials or budget. On the other hand, only three teaching strategies are
307 used by the study-participants. This only shows that TLE teachers lack knowledge of the
308 many teaching strategies. This can be addressed through trainings and workshops.
309 However, despite their conditions, teacher-participants remain positive that sooner or later
310 their TLE program will be accredited and recognized locally and internationally. Ironically the
311 participants did not suggest improvement for the schools rather improvement for themselves.
312 This implies that TLE materials may be easy to acquire but not the attitude.

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4.1 Implication for practice

The challenges in teaching TLE in public high schools are real. It can't be solved by the TLE themselves rather by strong and concrete solution. Re-training of TLE teachers are necessary and needs to be prioritized. Aside from re-training, TLE equipment should be given attention. No matter how motivated the teachers are, they cannot do anything without the necessary equipment for the tasks.

COMPETING INTERESTS

There was no competing interest exist in the conduct of this study.

ETHICAL APPROVAL

To address the ethics in conducting a research study, the researchers considered some measures to handle the confidentiality of the participants and the information obtained. Firstly, consent letters were given to the participants to seek for their permissions. Secondly, the interview protocol which states that no revelation of true identity shall be done and participants may opt to use pseudonyms to hide their identities was strictly observed. Thirdly, the in-depth interview was conducted in a secluded office that provided ample privacy, little distractions, and comfortable environment to the participants. Lastly, the participants were assured that the recorded interview was kept by the researchers for safe-keeping and would be destroyed after two years. Moreover, the information obtained were to be used for research purposes only.

REFERENCES

1. Acharya AS, Prakash A, Saxena P, Nigam A. Sampling: Why and how of it. *Indian Journal of Medical Specialties*. 2013; 4(2), 330-333.
2. Ajithkumar MU. Training of teachers: Institutionalising training and development of academic faculty of TVET institutions for realising excellence. In *India: Preparation for the World of Work*. 2016; (pp. 183-210). Springer VS, Wiesbaden.
3. Alseddiqi M, Mishra R, Pislaru C. Design and development of an on-line work-based learning (WBL) module to enhance technical and vocational education (TVE) system in Bahrain. 2010. In *Global Learn* (pp. 1168-1178). Association for the Advancement of Computing in Education (AACE).
4. Baldissoni G, Comberti L, Bosca S, Murè S. The analysis and management of unsafe acts and unsafe conditions; 2018. Data collection and analysis. *Safety Science*.
5. Birks M, Chapman Y, Francis K. Memoing in qualitative research: Probing data and processes. *Journal of research in nursing*. 2008; 13(1), 68-75.
6. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology*. 2006; 3(2), 77-101.
7. Brinkmann S. *Interview*. Springer New York. 2014; 1008-1010.
8. Burbules NC, Torres CA. Globalization and education: Critical perspectives. Routledge. 2013.
9. Csibra G, Gergely G. Natural pedagogy. *Trends in cognitive sciences*. 2009;13(4), 148-153.
10. Creswell JW. *Qualitative research and research design: Choosing among five traditions*. London: Thousand Oaks. 1998.
11. Creswell JW, Clark VLP. *Designing and conducting mixed methods research*. Sage publications. 2017.

- 366 12. Crowley AL, Yow E, Barnhart HX, Daubert MA, Bigelow R, Sullivan DC, Douglas PS
367 (2016). Critical review of current approaches for echocardiographic reproducibility and
368 reliability assessment in clinical research. *Journal of the American Society of*
369 *Echocardiography*. 2016;29(12), 1144-1154.
- 370 13. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive
371 sampling. *American journal of theoretical and applied statistics*. 2016;5(1), 1-4.
- 372 14. George G. Workplace ART programmes: Why do companies invest in them and are
373 they working? *African Journal of AIDS research*. 2006; 5(2), 179-188.
- 374 15. Giddens A. Runaway world: How globalization is reshaping our lives. Taylor & Francis.
375 2003.
- 376 16. Golter P, Van Wie B, Brown G. Foundations for Validating a Critical Thinking
377 Rubric. *Journal of STEM Education*. 2017;17(4).
- 378 17. Goodman SN, Fanelli D, Ioannidis JP. What does research reproducibility
379 mean? *Science translational medicine*. 2016;8(341), 341ps12-341ps12.
- 380 18. Greenwood M, Kendrick T, Davies H, Gill FJ (2017). Hearing voices: Comparing two
381 methods for analysis of focus group data. *Applied Nursing Research*, 35, 90-93.
- 382 19. Ismail N, Bakar AR, Hamzah R (2011). The expectation of TVE students teachers to
383 choose teaching as a career.
- 384 20. Jenkins R. Globalization, production, employment and poverty: debates and
385 evidence. *Journal of International Development*. 2013; 16(1), 1-12.
- 386 21. Joffe H. Thematic analysis. *Qualitative research methods in mental health and*
387 *psychotherapy: A guide for students and practitioners*. 2012;1, 210-223.
- 388 22. Hammersley M. *Routledge Revivals: The Dilemma of Qualitative Method (1989):*
389 *Herbert Blumer and the Chicago Tradition*. Routledge. 2018.
- 390 23. Kamin Y, Saud MS, Hamid MZA, Ahmad A. Implementation of Teaching Methods in
391 Mechanical Engineering Program at the Malaysia's Vocational College. *Advanced*
392 *Science Letters*. 2017;23(1), 569-572.
- 393 24. Kober N. *Reaching students: What research says about effective instruction in*
394 *undergraduate science and engineering*. National Academies Press. 2015.
- 395 25. Kocór M. Skills shortages and mismatches on the Polish labour market and public
396 policy recommendations. *Zarządzanie Publiczne*. 2017;42(4), 38-52.
- 397 26. Kuper A, Reeves S, Levinson W. An introduction to reading and appraising qualitative
398 research. *Bmj*, 337, a288. 2008.
- 399 27. Kumpáioç N. Effects of ISO 9000 certification on firms' financial performance. 2015.
- 400 28. Lakatos A, Borsos A. Effective Teaching Methods for Knowledge Transfer
401 Improvement. In *Knowledge as Business Opportunity: Proceedings of the Management,*
402 *Knowledge and Learning International Conference*. 2011;455-464. International School
403 for Social and Business Studies, Celje, Slovenia.
- 404 29. Lincoln YS, Guba EG (1985). Establishing trustworthiness. *Naturalistic inquiry*.
405 1985;289, 331.
- 406 30. Merriam SB, Grenier RS (Eds.) *Qualitative research in practice: Examples for*
407 *discussion and analysis*. Jossey-Bass. 2019.
- 408 31. Mohamad MM, Saud MS, Ahmad A. The need in training and retraining for TVET
409 teachers in Malaysia. *Journal of Technical Education and Training*. 2009; 1(1).
- 410 32. Mortos AR, San Jose AE. Polishing the skills: Training evaluation of basic teaching
411 training course. *Journal of Studies in Social Sciences and Humanities*. 2018;4(2), 23-
412 32.
- 413 33. Napoli RP. *The Impact of Globalization on American Society*. 2019.
- 414 34. O Nyumba T, Wilson K, Derrick CJ, Mukherjee N. The use of focus group discussion
415 methodology: Insights from two decades of application in conservation. *Methods in*
416 *Ecology and Evolution*. 2018; 9(1), 20-32.

- 417 35. Oviawe JI, Uwameiye R, Uddin PS. Bridging skill gap to meet technical, vocational
418 education and training school-workplace collaboration in the 21st century. *International*
419 *Journal of vocational education and training research*. 2017;3(1), 7-14.
- 420 36. Paryono P. Approaches to preparing TVET teachers and instructors in ASEAN member
421 countries. *TVET@ Asia*.2015;5,1-27.
- 422 37. Rahmatizadeh S, Rajabifard A, Kalantari M, Ho S. A framework for selecting a fit-for-
423 purpose data collection method in land administration. *Land Use Policy*. 2018;70, 162-
424 171.
- 425 38. Reilly WT, Talley NJ, Pemberton JH, Zinsmeister AR. Validation of a questionnaire to
426 assess fecal incontinence and associated risk factors. *Diseases of the colon & rectum*.
427 2000;43(2), 146-153.
- 428 39. San Jose AE, Galang JG. Teaching strategies in teaching literature: Students in
429 focus. *International Journal of Education and Research*. 2015;3(4).
- 430 40. San Jose AE, Bahket R, Alsalhi HHA. Teach us the way we want: Teaching approach
431 for special needs students. *European Journal of Special Education Research*. 2017.
- 432 41. San Jose AE. Linguistic experiences of adult dyslexic learners. *UIC Research Journal*.
433 2012;18(1), 1-1.
- 434 42. Scherer AG, Palazzo G. Globalization and corporate social responsibility. 2008.
- 435 43. Schwab K. *The fourth industrial revolution*. Currency. 2017.
- 436 44. Shrewsbury CM. What is feminist pedagogy? *Women's Studies Quarterly*. 1993;21(3/4),
437 8-16.
- 438 45. Sobe NW, Kowalczyk J. Context, entanglement and assemblage as matters of concern
439 in comparative education research. In *World Yearbook of Education 2018* (pp. 197-
440 204). Routledge. 2017.
- 441 46. Stuckey HL. The second step in data analysis: Coding qualitative research
442 data. *Journal of Social Health and Diabetes*. 2015;3(01), 007-010.
- 443 47. Tapan SM. Using ICT in Teaching–Learning at the Polytechnic Institutes of
444 Bangladesh: Constrains and Limitations. *Teachers World-Journal of Education and*
445 *Research*. 2009;33, 207-217.
- 446 48. Thompson EP. Globalization in Historical. *Globalization and Its Critics: Perspectives*
447 *from Political Economy*. 2016;67.
- 448 49. Trochim WM. Qualitative validity. 2006.
- 449 50. Tugade MM, Fredrickson BL. Resilient individuals use positive emotions to bounce back
450 from negative emotional experiences. *Journal of personality and social psychology*.
451 2004;86(2), 320.
- 452 51. Udoka ST. The global economic crisis: A challenges to curriculum of implementation in
453 technical and vocational education technology in Nigeria. 2013. Retrieved 20th August
454 2019.
- 455 52. Vaira M. Globalization and higher education organizational change: A framework for
456 analysis. *Higher education*. 2004;48(4), 483-510.
- 457 53. van Manen M. *Phenomenology of practice: Meaning-giving methods in*
458 *phenomenological research and writing*. Routledge. 2016.
- 459 54. Vince-Garland KM, Holden K, Garland DP. Individualized clinical coaching in the TLE
460 TeachLivE lab: Enhancing fidelity of implementation of system of least prompts among
461 novice teachers of students with autism. *Teacher Education and Special Education*.
462 2016;39(1), 47-59.
- 463 55. Visser-Wijnveen GJ, Stes A, van Petegem P. Development and validation of a
464 questionnaire measuring teachers' motivations for teaching in higher education. *Higher*
465 *Education*. 2012;64(3), 421-436.
- 466 56. Weitzman EA. Analyzing qualitative data with computer software. *Health Services*
467 *Research*, 34(5 Pt 2), 1241. Weitzman, E. A. (1999). Analyzing qualitative data with
468 computer software. *Health Services Research*. 1999;34(5 Pt 2), 1241.

- 469 57. Yusof Y, Roddin R, Awang H. What Students Need, and What Teacher Did: The Impact
470 of Teacher's Teaching Approaches to the Development of Students' Generic
471 Competences. *Procedia-Social and Behavioral Sciences*. 2004;204, 36-44.
472 58. Yusof Y, Roddin R, Awang H, Ibrahim-Mukhtar M. Metacognitive Strategies in
473 Promoting the Development of Generic Competences in High TVE in
474 Malaysia. *Pertanika Journal of Social Sciences & Humanities*. 2017.

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