

# The Impact of Current Teaching Practices and Strategies on Student Life and Health Learning Outcomes at Zibo Vocational Institute, China

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Received: 26 October 2024 | Accepted: 3 February 2025 | Published: 15 March 2025

DOI: <https://doi.org/10.55057/ijares.2025.7.1.36>

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**Abstract:** *The integration of health and life science curricula at vocational colleges in China is the driving force behind this investigation. A positive philosophical position, a deductive research strategy, and an explanatory study design are utilized to examine health and life teaching initiatives. Primarily derived on surveys given to 379 students at Zibo Vocational College, the data provides valuable insights into the students' viewpoints and life experiences. The findings show that vocational college students benefit greatly from health and life skills classes. Using Excel and SPSS for quantitative data analysis, this study seeks to prove a causal relationship between student traits and life and health education approaches. This research contributes to the advancement of China's vocational education system by outlining concrete strategies for the integration of health and life sciences into technical university curricula. It assists students in preparing for a competitive job market while stressing the need of promoting their happiness. Educators and schools that care about their kids' well-being and want to know how to improve it could look to this study for guidance.*

**Keywords:** Higher vocational education, Life and health education, Integration, Explanatory research, Student perceptions

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## 1. Introduction

Content, delivery methods, and evaluation methodologies are all part of the current state of student life and health learning outcomes. A common metric for evaluating educational materials is how well they equip students to face the demands of the working world (Qadir & Al-Fuqaha, 2020). Unfortunately, there is sometimes a disconnect between what students learn in school and what employers need since current curriculum don't always account for the healthcare industry's fast changing expectations.

According to Zen et al. (2023), the way information is presented has a big influence on how engaged and understanding students are. The wide variety of student learning styles poses a challenge for traditional lecture-based methods, which may result in student disengagement and less-than-ideal learning outcomes (Ping, 2020). Despite their growing popularity, digital platforms and interactive sessions might not have the necessary integration and support to reap all of their advantages.

Teachers can better meet their students' varied learning styles and the ever-changing demands of the healthcare sector when they are able to adapt their pedagogical practices (Kravchenko, 2021). The problem is that many school systems aren't flexible enough to respond fast enough to changes in the world or to the specific requirements of each student.

There is apprehension at Zibo Vocational Institute that the present methods of instruction are not doing enough to equip students for these niche occupations, which could have an effect on their employability and general academic performance. The educational content can become more relevant and applicable through specialization, better meeting the needs of the industry (Li, 2020). More targeted and extensive instruction in students' areas of interest is another way it might boost engagement.

In order to ensure that students are adequately equipped for specialized jobs in the health care industry, this study looks at how specialization affects the efficacy of teaching methods and tactics (Salvador et al., 2022). Through the utilization of targeted tracks, the study seeks to pinpoint certain areas where present procedures are inadequate and offer suggestions for enhancement.

This research has its roots in China's larger educational reforms, which are an effort to bring China's vocational education system up to par with global norms. The necessity of developing new curricula, collaborating with businesses, and implementing creative teaching strategies is highlighted by these reforms (Wu & Chen, 2021). Nevertheless, the educational results are not uniform because of the substantial variation in how these reforms are put into practice across different institutions (Bell et al., 2024).

### **1.1 Problem Statement**

Despite the widespread agreement that digital health technologies are revolutionising healthcare education, very little is known about how these tools are influencing course offerings at China's most prestigious vocational universities. In particular, research into how well these tools improve student learning outcomes and get them ready for a healthcare system that relies on technology is urgently needed. The literature emphasises that health education faces the problem of successfully combining theoretical knowledge with practical abilities. Nevertheless, studies on the topic of healthcare worker preparation and the methods used to implement this integration at China's higher vocational institutions are lacking. Innovative methods of connecting student life and health learning outcomes theory and practise deserve further investigation. Despite widespread agreement that curricula should be subject to ongoing review and adjustment, little is known about how health and life sciences programmes at technical universities are adapting to meet the demands of a dynamic healthcare system and a growing population. The methods and standards for updating curricula, as well as the role of industry players in maintaining curricula's relevance, remain little understood.

### **1.2 Research Objectives**

**RO1:** To evaluate the impact of current teaching practices (content, delivery methods, assessment techniques) on student life and health learning outcomes at Zibo Vocational Institute, China.

**RO2:** To assess the influence of teaching strategies (integration, engagement, adaptability) on student life and health learning outcomes at Zibo Vocational Institute, China.

**RO3:** To examine the mediating role of teaching specialization in the relationship between current teaching practices (content, delivery methods, assessment techniques) and student life and health learning outcomes at Zibo Vocational Institute, China.

**RO4:** To investigate the mediating role of specialization in the relationship between teaching strategies (integration, engagement, adaptability) and student life and health learning outcomes at Zibo Vocational Institute, China.

### 1.3 Significance of Study

The findings of this study on the impact of life and health teaching strategies and practises in China's higher vocational schools could have far-reaching implications for many groups both inside and outside of academia. Because this study intends to improve students' educational experience and results, they stand to benefit a great deal from it. The study has the potential to improve instructional tactics by examining the efficacy of current teaching approaches and evaluation procedures. These strategies could be more interactive, engaging, and learning-friendly. Students will benefit from this in a number of ways, including enhanced professional readiness, more employment opportunities, and a more comprehensive set of skills and knowledge relevant to their chosen careers in healthcare.

## 2. Literature Review

In recent years, there has been a rising acknowledgment of the significance of student life and health learning outcomes within the setting of vocational education in China. This realization has spread throughout the country. An increased emphasis is being placed on the incorporation of health education into vocational training curricula (Li et al., 2021). This is because vocational education institutions all throughout the country are working hard to match their programs with both national health objectives and global educational standards. This move is reflective of a larger trend toward holistic education, which takes into consideration not only the technical skills that are necessary for the job but also the general well-being and health literacy of students. As a consequence of this, vocational institutes are developing comprehensive health education programs with the objective of improving the students' physical, mental, and emotional well-being. This is done in recognition of the fact that these aspects are essential for both personal growth and professional success in the rapidly changing job market (Chen & Zhou, 2023).

The increasing emphasis on life skills education, which includes a focus on health and well-being, is one of the most significant developments in vocational education in China (Wang & Liu, 2020). This is one of the most significant trends in China. As a part of this trend, there is a push away from traditional teaching methods that are based on lectures and toward approaches that are more interactive and student-centered, which actively engage students in their study. Among these strategies are problem-based learning, experiential learning, and the utilization of digital tools and resources, all of which have been demonstrated to increase students' health literacy as well as their life skills. In addition, these forward-thinking instructional methods are being supplemented with a supportive learning environment that places a priority on the well-being of the students by offering access to wellness programs, counseling, and health services. According to Xie et al. (2022), the purpose of this all-encompassing strategy is to cultivate a constructive learning environment in which students are able to experience a sense of safety, support, and motivation to achieve success in their academic endeavors as well as in terms of their health outcomes.

As worries about the mental health of students in China continue to grow, another rising trend is the incorporation of mental health education into vocational training programs (Zhang & Xu, 2021). This is a response to the growing number of issues that have been raised. High levels of stress, anxiety, and depression are experienced by a significant number of students attending

vocational colleges. This is mostly due to the increased academic requirements and the uncertainties associated with future employment. In response, educational institutions are incorporating mental health modules into their course offerings. These modules cover topics such as the management of stress, the regulation of emotions, and the development of resilience. These modules are typically presented to students in the form of workshops, seminars, and interactive activities. The purpose of these activities is to provide students with the resources they require to effectively manage their mental health. Additionally, vocational institutes are forming partnerships with professionals in the field of mental health in order to offer on-campus support services. This provides students with the opportunity to gain access to the resources they require in order to maintain their mental health and overall well-being (Gao & Li, 2023).

According to Liu and Wang's research from 2020, vocational education in China includes physical health education as an essential component. This is a reflection of the country's larger health promotion initiatives. A growing number of vocational schools are including physical education programs into their course offerings in response to the growing awareness of the significance of physical activity and healthy lifestyle choices for overall well-being. With the help of these programs, kids will be educated about the advantages of maintaining a healthy diet, encouraged to engage in healthy habits, and encouraged to engage in regular physical activity. A variety of extracurricular activities, such as sports clubs, fitness challenges, and wellness seminars, are being offered by some educational institutions in addition to the conventional physical education programs that are being offered. These activities are designed to involve students in a manner that is both enjoyable and interactive. According to Huang et al. (2022), these activities not only contribute to the enhancement of the students' physical health, but they also serve to cultivate a sense of community and belonging, which is critical for the students' overall well-being.

Creating a healthy campus environment that supports students' overall well-being is becoming an increasingly important concern in the context of vocational education (Chen et al., 2024). This is a matter that is becoming increasingly important. Among these are the establishment of policies and practices that encourage healthy lives, such as the elimination of smoking on campuses, the provision of healthy food options, and the implementation of programs that aim to reduce sedentary behavior. In addition, a great number of vocational schools are making investments in the physical infrastructure of their campuses, with the goal of developing areas that promote both physical activity and social contact. Several educational establishments, for instance, have created outdoor fitness facilities, walking pathways, and social spaces that encourage students to engage in physical activity and connect with their classmates. Vocational institutes strive to improve the overall well-being of its students and to establish a culture of health that extends beyond the confines of the classroom (Zhao & Wu, 2021). This is accomplished by cultivating a campus atmosphere that is both healthy and supportive.

Additionally, there is an increasing emphasis on health education that is adapted to the specific needs of vocational students (Sun & Feng, 2020). This is in addition to the programs that have been mentioned previously. As a result of the fact that vocational students frequently originate from a variety of circumstances and possess varied degrees of health literacy, some educational establishments are working to design health education programs that are specifically tailored to meet the particular health problems and difficulties that are experienced by this demographic. These programs frequently place an emphasis on the acquisition of practical health information and skills, such as first aid, nutrition, and personal cleanliness, which are directly applicable to the students' own life and the occupations they will pursue in the future.

The goal of these programs is to enhance the health outcomes of vocational students and to better prepare them for the demands of the job (Liu et al., 2023). This is accomplished by providing vocational students with the knowledge and skills they require to make informed decisions regarding their health.

## **2.1 Theoretical Framework**

### **Constructivist Learning Theory**

Constructivist Learning Theory posits that learners actively construct their own understanding and knowledge of the world through experiences and reflecting on those experiences. This theory, advanced by Jean Piaget and later expanded by Lev Vygotsky, emphasizes the importance of active involvement in the learning process rather than passive reception of information. In the context of Student life and health learning outcomes in higher vocational colleges in China, this theory can be applied to the current teaching practices including content, delivery methods, and assessment techniques. Constructivist principles advocate for a curriculum that encourages students to engage deeply with the material through hands-on activities, problem-solving tasks, and collaborative projects (Renninger, 2024). Delivery methods rooted in constructivism would involve interactive lectures, workshops, and simulations that provide students with opportunities to experiment and reflect on their learning experiences. Assessment techniques under this theory would shift from traditional exams to more formative assessments, such as portfolios and reflective journals, which allow students to demonstrate their understanding and growth over time (Walland & Shaw, 2022).

### **Social Cognitive Theory**

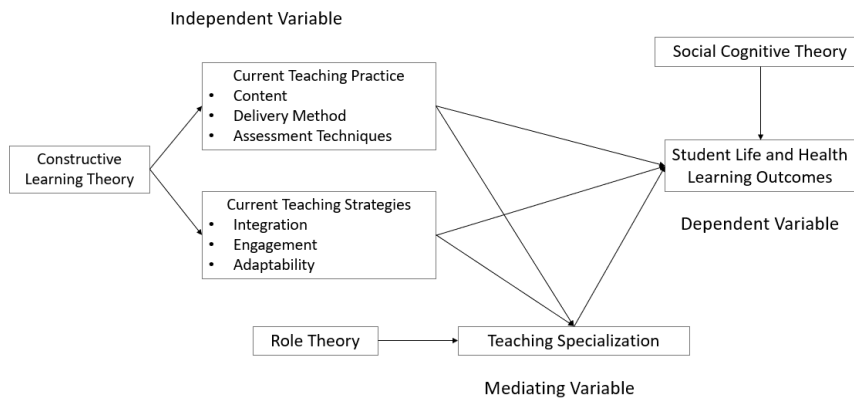
Social Cognitive Theory, developed by Albert Bandura, provides a comprehensive framework for understanding human behavior and learning processes, making it highly relevant for examining Student life and health learning outcomes as the dependent variable. This theory highlights the interplay between personal, behavioral, and environmental factors, emphasizing that learning occurs in a social context through observation, imitation, and modeling. In the realm of Student life and health learning outcomes in higher vocational colleges, Social Cognitive Theory underscores the significance of social interactions and observational learning. Students learn not only through direct instruction but also by observing the behaviors, attitudes, and outcomes of others within their educational environment (Adinda & Mohib, 2020).

Bandura's concept of self-efficacy, or one's belief in their ability to succeed in specific situations, is particularly pertinent in health education. Enhancing students' self-efficacy can lead to greater motivation and persistence in learning complex health-related topics. Educators can foster self-efficacy by providing opportunities for mastery experiences, verbal encouragement, and vicarious experiences through observation (Nikoçeviq-Kurti, 2021).

### **Role Theory**

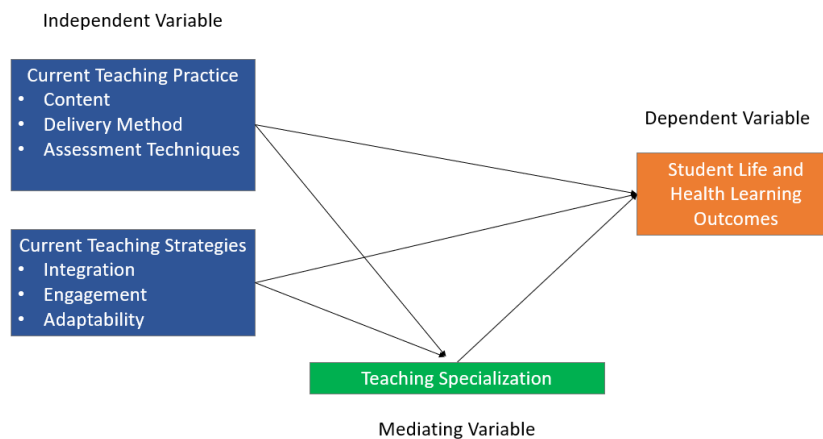
Role Theory serves as a valuable framework for understanding specialization in the context of Student life and health learning outcomes. This theory, which explores how individuals assume and perform roles within various social contexts, is instrumental in examining how specialized roles within the educational and healthcare settings influence educational outcomes. As students progress through their programs, they internalize the norms, values, and behaviors associated with their chosen specialties (Datuk, 2020). This process is facilitated by role models, such as instructors and practicing professionals, who exemplify the competencies and attitudes required in the healthcare field. The concept of role conflict and role strain, as described by Role Theory, also provides insights into the challenges students may face as they

navigate their educational pathways and transition into professional roles. Addressing these challenges through supportive educational practices can enhance students' role acquisition and professional identity formation.



**Figure 1: Theoretical framework**  
 (Source: Created by author)

## 2.2 Conceptual Framework



**Figure 2: Conceptual framework**  
 (Source: Self-created)

## 3. Methodology

This study has an intrinsically quantitative research design that focuses on the systematic collection and analysis of numerical data to understand the relationships between the variables. It examines the influence of current teaching practices and strategies in Student life and health learning outcomes at higher vocational colleges in China. The necessity for scientifically sound, quantifiable, and objective understanding of the mediating role of specialization in the relationship between instructional methods and results is the driving force behind this decision. Because variables can be precisely quantified using the quantitative technique, correlations, patterns, and causal links can be found that would be more difficult to see using qualitative methods.

This study's population is Zibo Vocational Institute, a well-known Chinese higher vocational college known for its extensive health and life education programs. The institute's broad and rich student body of over 26,000 full-time students provides an ideal setting in which to study

how different pedagogical approaches affect student achievement. There are several factors to consider when deciding on Zibo Vocational Institute. First, the results are likely to be strong and applicable to a wide range of situations because of the institute's huge student body. Secondly, the research is contextualized and relevantly aided by Zibo Vocational Institute's dedication to vocational education, which is in line with the study's emphasis on student life and health learning outcomes.

The optimum sample size for a population of 26,000 students, according to the table by Krejcie and Morgan (1970), is 379. Assuming a 5% margin of error and a 95% confidence level, this computation is based on making sure the sample is representative. Because it takes into consideration different population sizes and guarantees statistical validity and reliability, Krejcie and Morgan's table is a commonly used tool in educational research for establishing suitable sample sizes.

In this study, the primary instrument used for data collection is a structured questionnaire. The questionnaire comprises four sections: Current Teaching Practices, Teaching Strategies, Specialization, and Student Life and Health Learning Outcomes. Each section includes a series of statements to which respondents indicate their level of agreement on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The data for this study will be collected online, specifically through email and WeChat, to examine the impact of present practices and tactics in Student life and health learning outcomes at China's higher vocational colleges. This method is used because of all the benefits it offers, including as its accessibility, ease of use, low cost, and capacity to handle and analyze massive amounts of data effectively.

Using IBM SPSS Statistics, a robust and extensively utilized statistical program for quantitative data analysis, this study will analyze the data collected from higher vocational institutions in China that offer Student life and health learning outcomes programs. The research will focus on the impact of existing practices and teaching methodologies in this field. With SPSS, we may analyze the links between specialty, the dependent variable (the effectiveness of Student life and health learning outcomes), and the independent factors (current teaching practices and teaching methodologies). After the data has been cleaned and prepared, descriptive statistics, assessments of validity and reliability, inferential statistics, and mediation analysis will be performed.

## 4. Results

### 4.1 RQ1: What is the impact of current teaching practices (content, delivery methods, assessment techniques) on student life and health learning outcomes at Zibo Vocational Institute, China?

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.456	.281		1.622	.106
	Current Teaching Practices	.988	.008	.988	122.478	<.001

a. Dependent Variable: Student Life and Health Learning Outcomes

Present day pedagogical methods have an exceptionally high t-value of 122.478 and a claimed significance level (Sig.) below 0.001. The strong statistical significance of the association between the current teaching approaches and the life and health learning outcomes for students is demonstrated by this value. The likelihood of this correlation happening by coincidence is less than 1%, which provides strong evidence that the way teachers are currently implementing their lessons has a significant impact on the health and well-being of their students.

**4.2 RQ2: What is the influence of teaching strategies (integration, engagement, adaptability) on student life and health learning outcomes at Zibo Vocational Institute, China?**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.186	.785		4.058	<.001
	Teaching Strategies	.896	.022	.901	40.254	<.001

a. Dependent Variable: Student Life and Health Learning Outcomes

The data on the regression model's constant, or intercept, is presented in the first row. A standard error of 0.785 is associated with the constant's unstandardized coefficient (B), which is 3.186. When the variable for teaching methodologies is set to zero, this coefficient indicates the predicted value of the learning outcomes related to students' lives and health. The significance level (Sig.) is less than 0.001, and the t-value linked to the constant is 4.058. At the 95% confidence level, the constant is statistically significant, therefore there is a baseline level of student life and health learning outcomes that is meaningfully different from zero, even without teaching methodologies.

**4.3 RQ3: What mediating role does specialization play in the relationship between current teaching practices (content, delivery methods, assessment techniques) and student life and health learning outcomes at Zibo Vocational Institute, China?**

		Current Teaching Practices	Specialization	Student Life and Health Learning Outcomes
<b>Current Teaching Practices</b>	Pearson Correlation	1	.846**	.988**
	Sig. (2-tailed)		<.001	<.001
	N	379	379	379
<b>Specialization</b>	Pearson Correlation	.846**	1	.853**
	Sig. (2-tailed)	<.001		<.001
	N	379	379	379
<b>Student Life and Health Learning Outcomes</b>	Pearson Correlation	.988**	.853**	1
	Sig. (2-tailed)	<.001	<.001	
	N	379	379	379

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation between current teaching practices and student life and health learning outcomes is very strong ( $r = .988, p < .001$ ), indicating that enhancements in teaching practices are closely associated with improvements in students' health and learning outcomes. Similarly, a strong positive correlation exists between current teaching practices and specialization ( $r = .846, p < .001$ ), suggesting that teaching practices are highly aligned with students' chosen

specializations. There is also a strong correlation between specialization and student life and health learning outcomes ( $r = .853, p < .001$ ), indicating that students' fields of study significantly impact their learning and health-related achievements. All correlations are significant at the 0.01 level, highlighting a robust interrelationship among these variables.

#### 4.4 RQ4: What mediating role does specialization play in the relationship between teaching strategies (integration, engagement, adaptability) and student life and health learning outcomes at Zibo Vocational Institute, China?

		Teaching Strategies	Specialization	Student Life and Health Learning Outcomes
<b>Teaching Strategies</b>	Pearson Correlation	1	.917**	.901**
	Sig. (2-tailed)		<.001	<.001
	N	379	379	379
<b>Specialization</b>	Pearson Correlation	.917**	1	.853**
	Sig. (2-tailed)	<.001		<.001
	N	379	379	379
<b>Student Life and Health Learning Outcomes</b>	Pearson Correlation	.901**	.853**	1
	Sig. (2-tailed)	<.001	<.001	
	N	379	379	379

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The relationship between teaching strategies and specialization is particularly robust ( $r = .917, p < .001$ ), suggesting that effective teaching strategies are highly compatible with students' areas of specialization. Similarly, teaching strategies have a strong positive association with student life and health learning outcomes ( $r = .901, p < .001$ ), implying that well-designed teaching approaches are closely linked to improved student well-being and learning outcomes. Additionally, specialization shows a strong correlation with student life and health learning outcomes ( $r = .853, p < .001$ ), indicating that students' chosen fields of study significantly impact their health and educational achievements. All correlations are significant at the 0.01 level, highlighting a cohesive relationship among these aspects.

## 5. Conclusion

This study's results highlight the importance of instructional techniques and practices in shaping Zibo Vocational Institute students' lives and health-related learning outcomes. Evidence suggests that a high level of specialization and the use of effective teaching practices are crucial for producing desirable educational outcomes. Given the high degree of association between these factors, it is clear that effective teaching strategies have a significant impact on student achievement. To further improve student outcomes, the institute must continue to evolve its educational methodologies, with an emphasis on improving teaching procedures and integrating specialized information. Insights from this study can help educators and policymakers improve health and life skills education, which in turn helps students graduate with the skills they need to succeed in their careers and personal lives.

## References

- Adinda, D., & Mohib, N. (2020). Teaching and instructional design approaches to enhance students' self-directed learning in blended learning environments. *Electronic Journal of eLearning*, 18(2), 162-174.
- Bell, A., Borges Dario, A., Klinner, C., Nisbet, G., Penman, M., Storer, D., & Monrouxe, L. (2024). Improving the quality of allied health placements: student, educator and organisational preparedness. *Studies in Continuing Education*, 1-23.
- Datuk, A. (2020). Internalization of Character Education in Era 4.0 as A Moral Conservation Solution for Students in Kupang City. The 5th Progressive and Fun Education International Conference (PFEIC 2020),
- Kravchenko, L. V. (2021). Combination of conventional and innovative methods of teaching healthcare disciplines in the training of future teachers. *НАУКО В И Й В І С Н И К*, 117.
- Li, L. (2020). Education supply chain in the era of Industry 4.0. *Systems Research and Behavioral Science*, 37(4), 579-592.
- Nikoçeviq-Kurti, E. (2021). Fostering Student Teachers' Self-Efficacy and Professional Identity Through Vicarious Experiences. *International Journal of Education and Psychology in the Community*, 11(1/2), 140-163.
- Ping, R. L. S. (2020). *Exploring the learning outcomes of flipped learning in a Second Language (L2) academic writing classroom for low proficiency pre-university students* Doctoral dissertation, Doctoral thesis, Swinburne University of Technology ...].
- Qadir, J., & Al-Fuqaha, A. (2020). A Student Primer on How to Thrive in Engineering Education during and beyond COVID-19. *Education Sciences*, 10(9), 236.
- Renninger, E. P. (2024). Exploring the Impact of Constructivist Learning on Students' Problem-Solving Abilities in Education. *Jurnal Ilmu Pendidikan dan Humaniora*, 13(2), 81-91.
- Salvador, R., Limon, M., Borromeo, C. M., Parinas, M. A., Manrique, L., de la Cruz, L., & Dalere, J. M. (2022). Exploring technical-vocational education teachers' challenges and adaptation strategies in teaching courses outside their specializations. *Journal of Technical Education and Training*, 14(2), 34-48.
- Walland, E., & Shaw, S. (2022). E-portfolios in teaching, learning and assessment: tensions in theory and praxis. *Technology, Pedagogy and Education*, 31(3), 363-379.
- Wu, Y. J., & Chen, J.-C. (2021). Stimulating innovation with an innovative curriculum: a curriculum design for a course on new product development. *The International Journal of Management Education*, 19(3), 100561.