

Fundamental Elements for Self-Initiated Professional Development among TVET Teachers: A Literature Review

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Abstract

Technical and Vocational Education and Training (TVET) plays an important role in developing skilled workers to meet economic demands, contributing directly to human capital by equipping individuals with productive and adaptive skills. This study aims to discuss the elements required to produce a Self-Initiated Professional Development framework for TVET teachers in technical secondary schools and vocational colleges. This methodology involves extracting elements from the Scopus and Google Scholar databases, based on previous research papers, articles and e-books. The results show that school administrators, collaborative environment, autonomy, positive attitude, understanding, willingness, and problem-solving skills are key elements for effective Self-Initiated Professional Development. The conclusion emphasizes that Self-Initiated Professional Development enables teachers to take control of their learning, encouraging self-reflection and continuous growth. Recommendations include empowering Self-Initiated Professional Development to support the Malaysian Ministry of Education's professional development initiatives, ensuring TVET teachers remain competitive and ready for the workforce. This framework is essential to address today's educational challenges and improve TVET teachers' competence with technology and collaboration.

Keywords: Professional Development, Self-Initiated Professional Development, Continuing Professional Development, TVET Teachers

Introduction

Technical and Vocational Education and Training (TVET) plays a vital role in developing skilled workers to meet current economic demands, directly contributing to human capital by equipping individuals with productive and adaptive skills (UNESCO-UNEVOC, 2023). Empowering human capital through education, good jobs, and economic growth is a key element of the Sustainable Development Goals (SDG) 2016–2030. The 12th Malaysia Plan (RMK12) includes initiatives aimed at empowering TVET to improve vocational education, thereby supporting Shared Prosperity Visions 2030 (WKB 2030). To achieve these ambitious

goals, it is imperative for TVET teachers in technical secondary schools and vocational colleges to enhance their teaching quality. This involves improving infrastructure, updating curricula to align with industry needs, and enhancing teacher skills through continuous training and professional development (Casto, 2019; González-Pérez & Ramírez-Montoya, 2022; Situmorang et al., 2022).

Strengthening TVET teachers' competence is essential for effective teaching using the latest technology and methods, ensuring students are well-prepared for the workforce. Professional development for TVET teachers is crucial in maintaining competitiveness in teaching relevant skills. Continuous training in the latest teaching methods, technology, and industry developments not only improves teaching skills but also deepens teachers' understanding of their fields (Fernández-Batanero et al., 2022; Mallarangan et al., 2024). TVET teachers require ongoing professional development to stay current with the latest knowledge and skills, ensuring their students remain relevant in the current market (Makgato, 2021; Okolie et al., 2020; Subrahmanyam, 2020). The Continuing Professional Development (CPD) plan has been developed to support teachers' professional transformation, promoting Self-Initiated Professional Development. This approach encourages active learning and self-reflection, crucial for addressing today's educational challenges. By aligning with the Malaysian Ministry of Education's professional development initiatives, Self-Initiated Professional Development enhances teacher efficiency with technology and fosters collaboration among educators, thus strengthening TVET as a driver of Malaysia's progress.

Method

This study aims to discuss the fundamental elements of Self-Initiated Professional Development that are necessary and appropriate in producing a Self-Initiated Professional Development framework for TVET teachers in technical secondary schools and vocational colleges. These elements are collected based on literature studies related to elements used in professional development. The elements are extracted from Scopus and Google Scholar databases based on previous research papers, articles, and e-books on teacher self-learning and teacher professional development. All elements that are required for Self-Initiated Professional Development have been taken into account, thus providing a broad set of elements needed by TVET teachers, especially in technical secondary schools and vocational colleges. The information is explained through this literature review.

Results

The literature review highlights several fundamental elements essential for Self-Initiated Professional Development among TVET teachers. A detailed review of the fundamental elements used for self-initiated professional development based on literature review is presented in Table 1

Table 1

Review of Fundamental Elements Used for Self-Initiated Professional Development

ID	Author (Year)	Elements														
		School Administrators	Collaborative Environment	Autonomy	Attitude	Understanding	Readiness and Problem-Solving Skills	Strategy	Access to Resources	Mentorship	Reflective Practice	Professional Learning Communities	Incentives and Recognition	Flexible Learning Opportunities	Feedback Mechanisms	Industry Partnerships
A1	Bunimin (2016)	/						/								
A2	Rana et al. (2016)	/	/	/			/									
A3	Nurfadilla (2016)	/	/	/	/	/										
A4	Weir (2017)		/	/	/	/		/				/	/			
A5	Faizulizami (2017)	/	/	/	/	/						/				
A6	Louws et al. (2017)	/		/	/							/			/	
A7	Darling-Hammond et al. (2017)								/							
A8	Riddle (2019)	/	/	/	/	/										
A9	Akinyemi et al. (2019)	/	/		/											
A10	Jonathan (2019)	/	/		/	/	/									
A11	Hicks (2020)			/	/		/	/								
A12	Hill (2020)	/	/	/	/											/
A13	Asonglefack (2021)									/						
A14	Dhungana (2022)										/					
A15	Zohar & Ben-Ari (2022)													/		

The first element found based on the literature review is school administrators, who are crucial in helping teachers implement professional development effectively. The support of school administrators, which plays a pivotal role in fostering a conducive learning environment (Akinyemi et al., 2019; Bunimin, 2016; Hill, 2020). Previous studies (Akinyemi et al., 2019; Bunimin, 2016; Hill, 2020; Jonathan, 2019; Louws et al., 2017; Nurfaradilla, 2016; Rana et al., 2016; Riddle, 2019; Weir, 2017) have shown that administrators should provide support such as time, funds, and materials, guide teachers in their professional development, and demonstrate good leadership. However, teachers, especially TVET teachers, often lack the time to schedule professional development activities due to their busy work schedules. A collaborative environment, as emphasized by several studies (Akinyemi et al., 2019; Bunimin, 2016), allows teachers to learn from peers. Teacher autonomy is a critical factor, enabling individuals to tailor their professional development pathways (Hicks, 2020; Hill, 2020). Positive attitudes and a solid understanding of professional development needs contribute significantly to the process (Nurfaradilla, 2016; Rana et al., 2016). Other key elements include readiness and problem-solving skills (Riddle, 2019), access to resources (Weir, 2017), and mentorship (Darling-Hammond et al., 2017). Additionally, professional learning communities (PLCs) provide structured collaboration platforms (Hicks, 2020; Weir, 2017), while incentives, flexible learning opportunities, and industry partnerships further enhance the effectiveness of self-directed learning initiatives (Asonglefah, 2021; Riddle, 2019).

Discussion

The literature review highlights several essential elements that contribute to self-initiated professional development among TVET teachers. A recurring theme is the importance of school administrators and their role in fostering a supportive environment. Multiple studies (Akinyemi et al., 2019; Bunimin, 2016; Hill, 2020) consistently emphasize the need for administrators to encourage teachers' self-development through resources, mentorship, and creating a culture that allows for growth. Without this support, teachers may find it difficult to engage in meaningful professional development initiatives. Another element that appears frequently in the literature is the role of a collaborative environment. Teachers tend to benefit greatly when they work in teams or groups that encourage peer-to-peer learning. Research by Bunimin (2016) and Akinyemi et al. (2019) highlights that collaboration fosters idea exchange, leading to better teaching practices. A supportive and communicative environment enhances self-initiated learning, allowing teachers to grow both personally and professionally.

Next, autonomy is also a recurring factor in professional development. Studies by (Hicks, 2020; Hill, 2020) highlight the importance of allowing teachers to direct their learning. When given autonomy, teachers feel more responsible and motivated to explore areas they find relevant to their teaching practice. Autonomy empowers them to tailor their development to meet their specific needs, ensuring more targeted and effective professional growth. Attitude, understanding, and readiness for change play significant roles in how TVET teachers approach professional development. Several studies (Nurfaradilla, 2016; Rana et al., 2016) emphasize that teachers with a positive attitude toward learning and an understanding of their own development needs are more likely to engage in self-initiated professional development. Readiness and problem-solving skills (Riddle, 2019) are essential, as teachers must be adaptable and willing to address challenges proactively.

In addition to these elements, the availability of resources and the presence of mentorship are crucial in ensuring the success of self-initiated professional development. Studies by (Darling-Hammond et al., 2017; Weir, 2017) show that access to the right resources whether technological, educational, or financial greatly influences the ability of teachers to continue developing their skills. Similarly, mentorship, whether formal or informal, provides guidance and support, helping teachers to reflect on their practice and continuously improve. Professional Learning Communities (PLCs) also play a significant role, as highlighted by Hicks (2020) and Weir (2017). These communities allow teachers to collaborate in structured, reflective settings. Involvement in PLCs provides opportunities for teachers to learn from one another, which enhances their teaching methods and broadens their understanding of effective teaching strategies.

Interestingly, while many studies highlight common elements, some unique factors also emerge. For instance, some studies (Riddle, 2019) discuss incentives and recognition as motivators for teacher engagement in professional development. These elements are less frequently mentioned but are essential in driving continuous learning. Flexible learning opportunities Weir (2017) and industry partnerships Asonglefac (2021) further highlight the need for adaptable learning structures and practical, real-world knowledge to make professional development more relevant to TVET teachers. In conclusion, self-initiated professional development for TVET teachers is a multifaceted process, relying on support from school administrators, collaboration with peers, teacher autonomy, and access to resources. Although certain elements like incentives and industry partnerships are less commonly mentioned, they play a valuable role in promoting sustained and meaningful professional growth.

Conclusion

This literature review identifies several fundamental elements essential for self-initiated professional development among TVET teachers. One of the key findings is the significant role of school administrators in providing necessary support for teachers' professional growth. Administrators ensure that teachers have access to vital resources such as time, materials, and guidance, which are crucial for engaging in self-directed learning. Without this institutional backing, many TVET teachers may struggle to find the time and resources needed for professional development due to their demanding workloads.

Self-Initiated Professional Development for TVET teachers is a dynamic process that depends on key factors such as collaboration, autonomy, and guidance. Peer-to-peer learning promotes continuous improvement, while autonomy allows teachers to customize their learning based on individual needs. A positive attitude and a willingness to embrace challenges are essential for success, and access to resources, mentorship, and Professional Learning Communities (PLCs) further supports sustained growth. Moreover, unique factors like incentives, recognition, flexible learning opportunities, and industry partnerships play a vital role in maintaining adaptability and ensuring that teachers remain up-to-date with industry developments, thereby supporting high-quality vocational education.

Overall, Self-Initiated Professional Development for TVET teachers is a multifaceted process requiring a balance of institutional support, autonomy, collaboration, and access to resources to ensure lasting and meaningful progress. Distinguishing TVET professional development

from general education is critical, as TVET teachers have unique requirements. Identifying these elements can form the foundation for an effective professional development framework. Self-initiated development encourages teachers to take ownership of their growth, fostering self-reflection and continuous improvement, which is essential for addressing the challenges of modern education. Empowering Self-Initiated Professional Development is crucial to complement the Malaysian Ministry of Education's professional development initiatives, ensuring that teachers remain competitive in the global market.

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Appendix A*List of articles for this related to this research.*

ID	Author (Year)	Title
A1	Bunimin (2016)	Model Konsep Pembangunan Profesionalisme Tenaga Pengajar Kolej Vokasional Malaysia
A2	Rana et al. (2016)	Promoting Self-Directed Learning In A Learning Organization: Tools And Practices
A3	Nurfaradilla (2016)	Teacher Educators' Perspectives On The Sociocultural Dimensions Of Self-Directed Learning
A4	Weir (2017)	Understanding Self-Directed Professional Development In Mathematics For Elementary Teachers: A Phenomenographical Study
A5	Faizulizami (2017)	Empowering Teachers Through Self-Initiated Continuing Professional Development (Cpd): A New Vision For Teacher
A6	Louws et al. (2017)	Teachers' Self-Directed Learning And Teaching Experience: What, How, And Why Teachers Want To Learn
A7	Darling-Hammond et al. (2017)	Effective Teacher Professional Development
A8	Riddle (2019)	A Descriptive Exploration Of A Self-Directed Approach To Teacher Professional Development
A9	Akinyemi et al. (2019)	Allocation Of Time In Communities Of Practice: A Strategy To Enhance Continuing Professional Teachers' Development Of High Schools Teachers'
A10	Jonathan (2019)	A Guide For TVET Teachers In Utilizing Innovative Pedagogy A Guide For Tvet Teachers In Utilizing Innovative Pedagogy Acknowledgments
A11	Hicks (2020)	Educator View Of Professional Development And Perceived Influence On Practice
A12	Hill (2020)	Career And Technical Education Teachers' Attitudes Toward And Their Participation In Technology-Based Professional Development Training In Mississippi's High School Districts
A13	Asonglefac (2021)	Investigating Teachers' Perceptions Of Self-Initiated Professional Development
A14	Dhungana (2022)	Self-Initiated Dimension Of English Language Teachers'professional Development: A Narrative Inquiry
A15	Zohar & Ben-Ari (2022)	Teachers' Knowledge And Professional Development For Metacognitive Instruction In The Context Of Higher Order Thinking.