

Leadership Styles and Challenges in Technical and Vocational Education and Training (TVET) Institutions

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Abstract

In the Industrial Revolution 4.0 (IR 4.0) era, leadership has been acknowledged as vital in Technical and Vocational Education and Training (TVET) institutions to produce holistic human capital and highly skilled future talent. Therefore, TVET institutions' leaders must become great leaders in order to train and develop future leaders and adapt to new technologies and global challenges. TVET leaders can practice various leadership styles to achieve organisational goals. A systematic literature review was conducted to investigate the leadership styles and challenges in TVET institutions. 21 research articles from multiple digital sources have been selected for this study to analyse the leadership in TVET. The findings of this study pointed out different leadership styles such as Transformational Leadership, Distributed Leadership, and Innovative Leadership. This paper also highlighted the leadership challenges faced by the TVET leaders in this IR 4.0 era such as change management, disruptive technology, and stakeholder collaboration. These findings are then proposed as a framework for developing TVET leaders' professional competency in the IR 4.0 era.

Keywords: Leadership Challenges, Leadership Styles, TVET Leaders

1.0 Introduction

The Malaysian government presented the Twelfth Malaysia Plan, the country's five-year development strategy for 2021–2025, on September 27, 2021. The Twelfth Malaysia Plan 2021–2025 (Twelfth Plan) establishes a strategic development to achieve the goal of a "Prosperous, Inclusive, Sustainable Malaysia" concentrating on initiatives to revive economic growth, the nation's prosperity, and maintain environmental sustainability. For this purpose, three key themes, four catalytic policy enablers, and 14 game changers are introduced to provide a strong foundation for Malaysia's future. All the strategies and initiatives in the Twelfth Plan are aligned with the Shared Prosperity Vision 2030 (Wawasan Kemakmuran Bersama 2030) and the 2030 Agenda for Sustainable Development that will restore the economic growth momentum and support long-term development goals.

To achieve the Twelfth Plan's growth goals, it will be necessary to cultivate a talent pool of highly skilled individuals to support the demands of a growing economy. According to the Economic Planning Unit (2021), the labour market and education sector continue to face several challenges, including an inefficient job market, limited access to high-quality education, and weaknesses in the governance of educational institutions. Hence, Policy Enabler 1 in the plan will focus on “Developing Future Talent” to accelerate human capital development and elevate the quality of education to fulfil the industry demand. In this case, a strong and improved Technical and Vocational Education and Training (TVET) ecosystem is one of the “game changers” to produce future-ready talent and reduce the gap between the quality of TVET graduates and industry expectations.

According to UNESCO-UNEVOC (2019a), TVET in Malaysia is designed to increase skilled human capital through the delivery of high-quality education and training that is in line with market demands and offers resources for further education or entrepreneurial endeavours. Shift 4 of The Malaysia Education Blueprint 2015-2025 (Higher Education) outlines TVET as a significant pathway for vocational education and skills development as well as a major platform for lifelong learning. Therefore, TVET institutions require a productive, dedicated, and professional leader who can guide the institutions to compete effectively and generate students with top-tier knowledge and skills (Nashir *et al.* 2015). In addition, TVET leaders must be proactive in addressing the challenges and opportunities, especially in the context of the 21st century and Industrial Revolution 4.0 (IR 4.0).

In the era of IR 4.0, leadership is very crucial as it aids in achieving organisational goals, inspires the followers to work effectively by planning and managing, solving conflicts efficiently, guiding them upon required changes, and instilling confidence in them (Zulkifle *et al.* 2021). According to Muda *et al.* (2021), TVET leaders need to comprehend their strategic roles to contribute to the extension of knowledge and skills in the new challenging world. As the main role in the TVET institution, leaders have the significant task of structuring an effective learning ecosystem to prepare students for a future in the IR 4.0 era. TVET leaders need to respond to the needs of Education 4.0 with sufficient competencies so that they can be effective leaders who can bring the institution to the cutting edge of transformation. In the era of Education 4.0, leaders must be agile and adapt their leadership styles to fit the demands of the students, stakeholders, and TVET systems.

A new leadership paradigm is needed for the Fourth Industrial Revolution. In the face of unprecedented change, leaders must transform their organisations to remain relevant and competitive, leading their team members to opportunities and success (Leurent & Shook, 2019). The Leadership in the Fourth Industrial Revolution Transformation Map was developed by the World Economic Forum in November 2017 as a dynamic knowledge instrument to assist with the issues and propelling transformational change across sectors which include educational institutions. It explored six dimensions of leadership as depicted in Figure 1. One major idea and consensus emerged: responsive and accountable leaders put their people at the centre.



Figure 1: Leadership in the Fourth Industrial Revolution (World Economic Forum, 2019)

Effective leadership is perceived as a “bottleneck” in progressing the TVET agenda. (UNESCO-UNEVOC, 2019b). The UNEVOC TVET Leadership Programme for Asia and the Pacific addressed the key challenges in the region as stated in Figure 2.

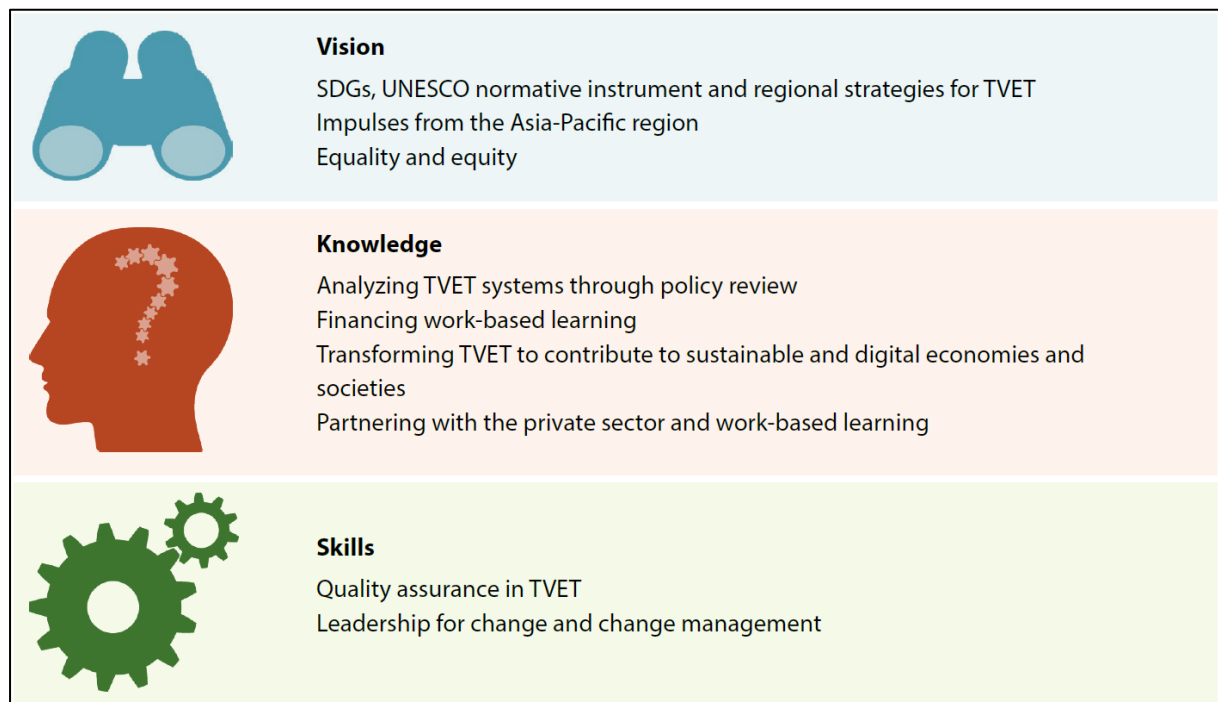


Figure 2: Key challenges addressed in the TVET Leadership Programme for Asia and the Pacific 2019. (UNESCO-UNEVOC, 2019b).

2.0 Methodology

This study used the Systematic Literature Review (SLR) method to integrate and analyse existing information and relevant research on the already published issue. This study examined published journals extracted from Scopus, ScienceDirect, ProQuest, Emerald, IEEE Xplore Digital Library, and Google Scholar. The data filtration used combinations of various keywords; “Leadership Style”, “Leadership Challenges”, “Leadership 4.0” and “TVET Leadership”. A set of inclusion and exclusion criteria has been carried out in this study to ensure the quality of the research. Articles must be published between 2015 and 2022 related to leadership in the vocational and educational sectors. After applying these methods, 21 research articles were finally selected as materials to be analysed. Figure 3 illustrates the seven steps of a systematic literature review.

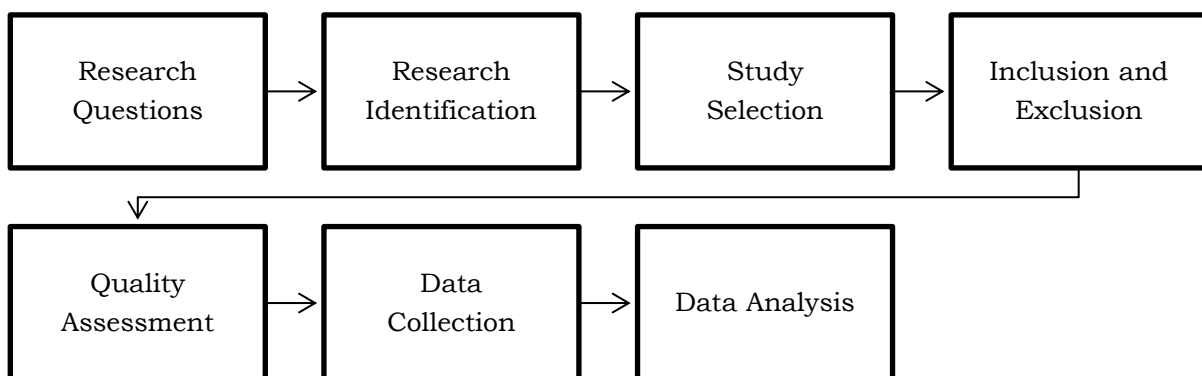


Figure 3: Systematic Literature Review Method (Chang *et al.* 2022)

3.0 Results and Discussion

The following Table 1 reviews the findings of the Systematic Literature Review (SLR) conducted across many digital libraries for the terms “Leadership Style”, “Leadership Challenges”, “Leadership 4.0” and “TVET Leadership” extracted from the 21 journal papers.

Table 1: Analysis of Leadership Journal

| Author | Study Domain | Dimension |
|-------------------------------|----------------------------------|---|
| Nordin & Ghani (2022) | Leadership Challenges | This paper examines the difficulties of developing TVET leadership among directors of vocational colleges. |
| Muda <i>et al.</i> (2021) | Leadership 4.0, TVET Institution | Style, characteristics, competencies, and ability are the four components that qualified TVET leaders must possess. |
| Abdullah <i>et al.</i> (2021) | Leadership Model, TVET Leaders | This study aims to develop a leadership model among leaders in TVET institutions under the Ministry of Education in Malaysia. |
| Rabindarang & Arjunan (2021) | Distributed Leadership | This study discusses the effectiveness of Distributed Leadership practices from an educational management perspective. |

| | | |
|-------------------------------|---|---|
| Fiandra <i>et al.</i> (2021) | TVET Leadership, Education 4.0 | This study looks at issues linked to digital opportunities associated with the presence of the Education 4.0 era and evaluates the challenges/ obstacles to grabbing the opportunities. |
| Zulkifli <i>et al.</i> (2021) | Leadership Approaches, Industrial Revolution 4.0, Leadership Challenges | This study examined the leadership approaches used by leaders during the Industrial Revolution 4.0. 8 Leadership Approaches: Traditional Leadership, Agile Leadership, Diversity Leadership, Ethical Responsibility, System Leadership, Technology Leadership, Entrepreneurial Leadership, and Adaptive Leadership. |
| Ismail & Yasin (2020) | Leadership Style, TVET Education, 21st century | This study seeks to define leadership style in TVET education in the 21st century; Autocratic, Democratic, and Laissez-Faire. |
| Roux (2020) | Leadership 4.0 | This chapter examines how organizations, work, and leadership are changing in the 4.0 context |
| Guzmán <i>et al.</i> (2020) | Leadership Skills, Industry 4.0 | This paper aims to present key leadership characteristics and skills as requirements for leaders in the transition process toward Industry 4.0. |
| Kin & Kareem (2019) | Education 4.0, Industrial Revolution 4.0, Leadership Competencies | The conceptual framework developed in this research serves as a foundation for identifying the essential leadership competencies in Education 4.0 |
| Osman & Kamis (2019) | Innovation Leadership | The study examines the issues, challenges, and leadership styles of Innovation Leadership for a sustainable organizational climate in Malaysia TVET institutions. |
| Shafiei & Norwani (2019) | Leadership Styles, Industrial Revolution 4.0, Higher Education Institution | This study was carried out to examine leadership styles at Malaysia's higher education institutions during Industrial Revolution 4.0; Transformational Leadership, Transactional Leadership, Situational Leadership, Distributive Leadership, Spiritual Leadership, and Academic Leadership. |
| Bush <i>et al.</i> (2018) | Transformational Leadership, Instructional Leadership, Distributed Leadership | The paper reviews three prominent leadership models (instructional, distributed, and transformational), linked to the Malaysia Education Blueprint (MEB). |

| | | |
|---------------------------------|--|--|
| Ibrahim & Ahmad (2017) | Leadership Approach, TVET Champions, Transformational Leadership | This paper investigates the leadership approach of TVET champions based on their actual experiences promoting TVET in Malaysia. |
| Nashir & Mustapha (2017) | TVET Leadership Model, Malaysia Polytechnics | This study was designed to determine the constructs to develop a new model of Innovative Instructional Leadership for Malaysia's polytechnic system. |
| Wahab <i>et al.</i> (2016) | Leadership Styles, Transformational Leadership | This study explores the leadership styles of academic leaders in Malaysian Public Universities. |
| Arokiasamy <i>et al.</i> (2016) | Leadership Styles, Transformational Leadership | This study indicated the level of transformational leadership styles by school principals using 4 dimensions; Individual Consideration, Intellectual Stimulation, Inspirational Motivation, and Idealized Influence. |
| Mohamad <i>et al.</i> (2016) | Strategic Leadership | This study aims to gather information on strategic leadership practices and organizational change readiness among leaders of vocational institutions. |
| Razak <i>et al.</i> (2015) | Leadership Styles | The study focuses on the leadership styles used by lecturers while engaging students in the teaching and learning process. |
| Ahmad (2015) | Leadership Challenges, Roles, and Characteristics | This study attempted to investigate the challenges, roles, and characteristics from the perspective of a higher-ranking leader in the TVET sector. |
| Sauffie (2015) | TVET Leadership, Transformation | This study examines how TVET is evolving to develop the next generation of leaders with technical skills, knowledge, and leadership credibility. |

This study aimed to examine the leadership styles and challenges of TVET institutions' leaders. According to Table 1, nine of the 21 papers discussed leadership styles, four discussed leadership challenges, and the rest discussed other issues. The results are based on the review outcomes of the existing studies published in the area of leadership in TVET institutions. Therefore, the results of this systematic literature review are grouped into the following themes: Leadership Styles in TVET and Issues and Challenges of Leadership in TVET.

3.1 Leadership Styles in TVET

According to Gipson *et al.* (2017), leadership style is the approach or set of consistent actions that a leader adopts to encourage followers, execute plans, and provide guidance and direction. Leadership style or a leader's characteristic behaviours include understanding their followers and their needs, adaptability and flexibility, trustworthiness, assertiveness, task competence, and capacity to motivate people (Zaccaro *et al.*, 2018). Thus, this study aimed to re-examine the recommended leadership styles by researchers to suit the appropriate leadership style of leaders in TVET institutions, as listed in Table 2.

Table 2: Leadership Styles and Characteristics

| Leadership Style | Characteristics | Researchers |
|-----------------------------|---|---|
| Transformational Leadership | Motivate, inspire, and stimulate organizational members' commitments and capabilities. | Ibrahim & Ahmad (2017); Wahab <i>et al.</i> (2016); Bush <i>et al.</i> (2018) |
| Distributed Leadership | Leadership roles and positions should be shared to create synergy among the staff. | Bush <i>et al.</i> (2018); Rabindarang & Arjunan (2021) |
| Innovative Leadership | Facilitating innovation in the organization by providing a conducive atmosphere for the development of creativity and productivity. | Osman & Kamis (2019); Nashir & Mustapha (2017) |
| Autocratic Leadership | Authoritarian and absolute control in which one leader holds the power to make decisions in an organization. | Ismail & Yasin (2020); Razak <i>et al.</i> (2015) |
| Democratic Leadership | Also known as Participative Leadership, in which members of the organization take a more participative role in the decision-making process. | Ismail & Yasin (2020); Razak <i>et al.</i> (2015) |

3.2 Issues and Challenges of Leadership in TVET

Leadership is about effectively dealing with change. To survive in a competitive environment, leaders who are involved in managing TVET institutions will need to develop a high capability for anticipating and adjusting to change. At the individual or organizational level, readiness for changes is critical in achieving the objectives of the organizational transformation (Mohamad *et al.* 2016). However, the research by Ahmad (2015) found that the employees and workers are unenthusiastic, resistant to change, and have low morale. A study conducted by Osman and Kamis (2019) found that the awareness of the teachers towards the transformation of TVET is moderate and they are not fully exposed to

relevant information about the implementation of the TVET transformation. TVET leaders should be knowledgeable about strategies to diagnose resistance to change and adapt their leadership styles to organizational change (UNESCO-UNEVOC, 2019b).

The context of TVET has to adapt to the changing world of work. To adapt to the constantly evolving learning environment, TVET leaders must be innovative and creative. Zulkifle *et al.* (2021) emphasized that leaders need to be fully ready and geared up as IR 4.0 has the power to transform a variety of things from the physical to the digital world, and the old methods of leadership approaches are insufficient to meet the challenges, opportunities, and requirements of IR 4.0. In this era of disruption, it was necessary to transfer not just knowledge and attitudes, but in the current era of education, it is also expected to be able to transfer technology (Prestiadi *et al.* 2020). This is where the role of TVET educational leadership is to think creatively and innovatively to adjust to technological developments in the 4.0 era.

Strengthening the industry network among TVET institutions to empower the 4IR community is the strategy highlighted in the TVET 4.0 Framework (2018–2025) under Thrust 5: Industry and Community Collaboration. The strong network between industry and TVET institutions is a cohesive intervention program to expand collaboration within the 4IR industry and strengthen collaboration with government agencies that support the 4IR thrust (Ministry of Education Malaysia, 2018). As highlighted in the UNEVOC TVET Leadership Programme 2019, establishing synergy among numerous TVET players helps coordinate policies and implement and develop an environment for stakeholder involvement. One major challenge Nordin and Ghani (2022) found is the lack of stakeholder collaboration. The symbiotic partnerships and engagement between TVET institutions and stakeholders are important to modernize and raise the profile of TVET.

4.0 Conclusion

Living in an era marked by rapid technological progress and increasing competition, it is clear that the world of work keeps changing at an incredible pace. It is also obvious that as economic, technological, and social developments continuously progress, so do the skill requirements in an educational organization. Therefore, Malaysian TVET leaders must be attentive to such developments and have the required management and leadership skills to translate their understanding into productive action. TVET systems have to adapt to changes. In many parts of the world, this adaptation process has to be accomplished under challenging situations, making leaders' roles even more significant.

This Systematic Literature Review explored leadership styles and practices in Technical and Vocational Education and Training (TVET) institutions. In the era of IR 4.0, managing and adapting to change, rapidly evolving educational technology, and promoting potential partnerships are the major challenges TVET leaders face. Further research is highly needed to analyse the characteristics, knowledge, skills, and preparation required for aspiring individuals seeking to move into the position of TVET leaders. With sharpened leadership and management skills, highly competent TVET leaders will help to facilitate the transformation of TVET and contribute to promoting a more inclusive, equitable, and sustainable world aligned with the objectives of the Sustainable Development Goals (SDG 4).

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Author Contributions

M.R. Mohd Khalid: Conceptualization, Abstract, Introduction, Discussion, Conclusion, Methodology, Result and Editing; **F.M. Noor:** Result, Discussion and Writing-Reviewing.

Conflicts of Interest

The manuscript has not been published elsewhere and is not under consideration by other journals. All authors have approved the review, agree with its Submission, and declare no conflict of interest in the manuscript.

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