PERFORMANCE RISK-TAKING AS CATALYSTS IN SHAPING TEACHERS' DIGITAL LEARNING AGILITY

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Abstract:

This study explores the role of performance risk-taking in shaping teachers' digital learning agility, focusing on how teachers adapt and innovate in response to challenges of integrating digital technologies into teaching practices. A qualitative case study approach was employed, involving semi-structured interviews with 45 participants, including primary and secondary school teachers, school administrators, and parents. Data were collected through physical and online interviews and analysed using thematic analysis to identify key patterns and insights related to performance risk-taking. Based on the findings, three key categories emerged, including (1) assessing experiences during risk-taking, (2) venturing into challenging conditions, and (3) learning through risk-taking experiences. The study highlights the importance of performance risk-taking to foster resilience and creativity among the teachers and also the need for supportive environments to empower teachers to embrace challenges while using digital technologies.

Keywords:

Performance Risk-Taking, Digital Learning Agility, Teachers, Qualitative Case Study

Introduction

In the rapidly evolving digital landscape, the education sector is undergoing profound changes that compel teachers to adapt their pedagogical practices to effectively integrate technology into their teaching (Abu Hanifah, Ghazali, Ayub, & Roslan, 2023; Chrismastianto & Wibawanta, 2023; Foina, 2024). This transformation involves not only acquiring technical skills but also developing digital learning agility that enables teachers to navigate challenges and uncertainties associated with digital learning environments (Røkenes et al., 2022). At the heart of this agility is the concept of performance risk-taking, which refers to the willingness of teachers to embrace innovative practices and experiment with new digital tools, despite the chances of failure or setbacks.

Performance risk-taking represents a critical yet often overlooked aspect of digital learning agility. It encapsulates a proactive mindset where teachers view challenges as opportunities for growth, thereby fostering resilience and adaptability (Chun & Yunus, 2023). The capacity to engage in calculated risk-taking is vital for leveraging technology, especially to enhance student engagement and create dynamic learning experiences (Sukumaran, Loveridge, & Green, 2014). Despite its significance, the Malaysian educational context inadequately explores the role of performance risk-taking in shaping teachers' digital learning agility. This is pertinent given the Malaysian Digital Education Policy, which aims to promote technology integration in the classroom.

This paper aims to fill this research gap by exploring how performance risk-taking serves as a catalyst for enhancing digital learning agility among teachers. Grounded in the preliminary framework of teachers' digital learning agility (Mohd Rosli et al., 2024), which identifies key dimensions such as speed, flexibility, and feedback-seeking behaviors, this study posits that performance risk-taking is a pivotal enabler for teachers striving to meet the dynamic demands of 21st-century teaching and learning. By exploring teachers' experiences in taking risks while using digital technologies, the findings of this research will provide actionable insights for teachers, policymakers, and educational institutions seeking to cultivate digitally agile teachers capable of thriving in an increasingly complex educational landscape.

Literature Review

"Performance risk taking" describes an individual's inclination to take on new tasks or roles that offer opportunities for challenge (Hoff & Burke, 2022). According to Tsai and Fang (2023), organisations that support risk-taking are better positioned to adapt to environmental changes and enhance work performance. Furthermore, it is evident that teachers who are willing to take risks in their teaching pedagogy can significantly improve student engagement and learning outcomes (Suriani, Merta, & Ardiansyah, 2023). This is particularly relevant in the context of digital learning, where teachers must continuously adapt to new technologies and pedagogical approaches. In other words, performance risk-taking plays a vital role in supporting teachers to be digitally agile by enabling them to experiment with new teaching methods, embrace technology, and adjust accordingly to improve performance in digital learning.

The concept of learning agility has its roots in earlier theories of learning and adaptability and is usually related to outcomes (Derue, Ashford, & Myers, 2012; Ghosh, Muduli, & Pingle, 2021; Howard, 2017). As shown in Figure 1, Mitchinson and Morris (2014) visualised the Learning Agility Assessment Inventory as a framework that consists of four learning enablers,

namely performing, reflecting, risking, and innovating, and a derailer. Burke and Smith (2018) further refined the concept by providing a view of learning agility in terms of behavioral characteristics and identified nine dimensions, including flexibility, speed, experimenting, performance risk-taking, interpersonal risk-taking, collaborating, information gathering, feedback seeking, and reflecting. The literature provides valuable insight into the notion that risk-taking behaviour is essential for driving performance, making it a key factor in shaping learning agility.

Figure 1: The Enabler And Derailer Of Learning Agility

Source: Mitchinson & Morris (2014), p.8

Learning agility has long been discussed in organizational agility to ensure successful and effective performance, but only a few in the context of education. Thus, this study aims to adopt and adapt this idea by borrowing the views in the Malaysian education context. The Malaysian education system has undergone significant transformations, particularly with the implementation of the Malaysia Education Blueprint 2013−2025, which emphasizes the need for teachers to adapt to new teaching methodologies and technologies. Similarly, teachers in Malaysia should incorporate digital technology into the education system, as mentioned in the second thrust of the Digital Education Policy (2024). As digital learning becomes increasingly prevalent, teachers must be provided a guideline to support them in navigating the demand in education. To address these gaps and identify the characteristics of digital learning agility among teachers, this study aims to address this research question: *How does performance risk-taking support digital learning agility among teachers?*

The conceptual framework of this study presented in Figure 1 highlights the pivotal role that performance risk-taking plays in fostering digital learning agility among teachers. When educators embrace risk, they cultivate essential qualities such as adaptability, experimentation, and innovation within their digital teaching practices. This willingness to take risks enables them to effectively navigate challenges and seamlessly integrate technology into their classrooms. As a result, their increased digital learning agility not only enhances their teaching methods but also enriches the overall learning experience for students, creating more engaging and technology-driven educational environments. The framework underscores how performance risk-taking empowers teachers to become more digitally agile, ultimately contributing to ongoing improvements in educational outcomes.
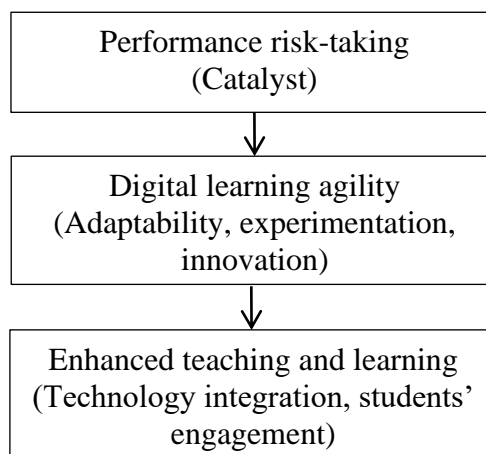
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┌─────────────────────────────┐
│   Performance risk-taking    │
│         (Catalyst)           │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Digital learning agility   │
│ (Adaptability, experimentation, │
│         innovation)          │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│ Enhanced teaching and learning │
│ (Technology integration, students' │
│         engagement)          │
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Figure 1: Conceptual Framework Of This Study

Methodology

The current research centers on developing a framework for digital learning agility specifically tailored for Malaysian teachers. To achieve the objectives of this study, a comprehensive data set was collected. However, this study focuses on a narrower scope, aiming to explore teachers adaptability by taking risks in enhancing their digital learning agility through their experiences with digital tools for teaching and learning.

This study employs a qualitative case study approach, which is particularly suited for exploring the "how" and "why" of a phenomenon (Creswell & Poth, 2016). This approach is best in providing a broad and in-depth exploration of teachers' experience and perceptions regarding performance risk-taking behaviour, one of the digital learning agility dimensions.

Data collection involved semi-structured interviews with 45 participants, including ten primary school and ten secondary school teachers, chosen by purposive sampling, specifically who have experience in using digital technology in teaching and learning. In addition, five school administrators and 20 parents (ten parents of primary school students and ten parents of secondary school students) were selected as samples for this study to provide insights into the institutional support and observations of teachers' risk-taking behaviors and also witnesses to teachers' initiatives and their impact on students' learning.

The interviews were conducted by school visits and via Google Meet, ensuring accessibility and convenience for all participants. Ethical approvals were obtained from the university and the Ministry of Education Malaysia, and all participants were provided informed consent for their involvement in this study. Each interview lasted approximately 80 minutes. The audio recordings were transcribed and securely stored. Findings of this study were analyzed using thematic analysis (Braun & Clarke, 2006).

Results and Discussion

Notably, when the teachers, school administrators, and parents were asked about their experiences in taking risks and witnessing the teachers taking risks, they highlighted three categories related to digital learning: (1) assessing their experiences during risk-taking, (2) venturing into challenging conditions, and (3) learning through experiences on risk-taking.

Firstly, the 45 participants biographical backgrounds were collected and all teachers, school administrators, and students from the respected parents are from Malaysian public primary and secondary schools. Table 1 shows the gender distribution and the teachers' level of digital competency.

Table 1: Participants' Demographic Profile

Category		Number of participants			
		Primary school teachers	Secondary school teachers	School administrators	Parents
Gender	Male	3	3	2	3
	Female	7	7	3	12
Digital competency level (Self asssesment)	1	–	–	–	–
	2	–	–	–	–
	3	4	3	–	–
	4	6	5	–	–
	5	–	2	–	–

Assessing To the Experiences During Taking Risks

Based on the data extracted from the interviews, the participants shared their perception by highlighting a complex relationship between professional experience, mental well-being, and the perception of risk-taking within the context of digital teaching and learning. One secondary school teacher articulated that experienced teachers are more likely to take riskier tasks by highlighting, *"If a teacher has a high grade, it indicates experience, so they may be more inclined to take on risky tasks. Conversely, for someone who is still new and learning, it's understandable for them to err on the side of caution"* (SM_C1). This viewpoint emphasizes the connection between experience and the willingness to face challenges, suggesting that the confidence gained through experience can alleviate fears of failure.

A primary school teacher offered a more nuanced perspective, by emphasizing a critical role of mental health and self-awareness in making decisions about risk-taking. *"For me, mental health intertwines with everything pertaining to performance,"* emphasizes SR_EC1. *"If you're able to manage your mental well-being first, then go ahead. However, if you can't, it's better not to proceed."* He/she highlights the importance of recognizing limitations by stating *"We're not afraid of failure; I've experienced failure many times. But sacrificing performance should not overshadow more significant priorities."* This reflection highlights the necessity of a comprehensive approach to risk-taking that prioritizes mental health while acknowledging personal and professional boundaries.

A parent conveyed an understanding and accepting perspective towards teachers who engage in risky tasks, emphasizing that risks are inherent in any profession. P17 asserted that *"In any line of work, there are inherent risks. Therefore, I remain open-minded and accepting. If something doesn't go as planned, yet the teacher still achieves success, Alhamdulillah."* This perspective reflects a supportive stance, recognizing the challenges faced by teachers and valuing their efforts, even when outcomes are uncertain.

Based on the experiences faced by the teachers and parents, it is worth saying that fostering a supportive and understanding environment, both within schools and in the broader community, is pivotal for enabling teachers to take meaningful risks even though there are challenges in digital learning. This is because teachers who feel supported are more likely to enhance their willingness to adopt new technologies in classroom (Huang et al., 2024). Ferguson and Sutphin (2021) also asserted that establishing safe space for teachers to experiment with digital tools can help them build confidence without fear of negative repercussion.

Venturing into Challenging Conditions

This finding delves into the experiences of participants as they tackle unfamiliar or challenging tasks. These insights gathered reveal the remarkable adaptability and determination of teachers when confronted with new responsibilities related to utilization of digital technologies. Teachers shared a notable experience during the school closure in Covid-19 pandemic when they were asked to do tasks that were entirely new for them. One of the secondary school teachers, SM_EC2 stated that *"I was assigned a task to be a host during online assembly. So, I challenge myself to learn and use one new software."* Similarly, SM_EM2 highlights that *"I was asked to analyse students' participation during online class by using a method that was completely unfamiliar to me."* SM_N2 also stated that *"I carried out online lessons on YouTube and it is not something that I initially know."* Despite the difficulties faced, the teachers demonstrated resilience. For instance, SM_EC2 proved that *"I really enjoy that learning process. As a teacher, I tried to explore things when I get any task."* Similarly, *"I kept learning to do live lessons and improve"* (SM_N2).

Furthermore, primary school teachers shared their experiences learning to use digital platforms. Although they initially lacked proficiency, they took the initiative to acquire the necessary skills. For instance, SR_S2 and SR_N1 were similarly assigned tasks on creating Google Forms, and they self-learned how to do it. SR_S2 explained that *"...I wasn't proficient in using it (Google Forms), so, I learned by soughing assistance from friends and sometimes referred to YouTube tutorials for step-by-step guidance."* SR_N1 highlights that *"I learned from Google and YouTube and thought other teachers too."* From these findings, it emphasizes the proactive approach that teachers adopt to overcome challenges by utilizing available resources and support networks.

The adaptability of teachers and their willingness to take on new responsibilities in unfamiliar conditions were recognized by school administrators. One administrator, NA, noted that *"Recently, there was a talk about 'Give Me Five.' It is something new. Personally, and among other experienced teachers, we were not familiar with it. However, some teachers, despite its novelty, were quick to say, 'No problem, teacher, I can handle it.'"* This perspective underscores the openness and competency of the teachers as they challenged themselves to embrace innovative practices.

The findings highlight the proactive stance teachers take in challenging themselves to learn about digital technologies, emphasizing their commitment to professional growth and adaptability in the ever-changing educational landscape. This finding aligns with studies by Villarba et al. (2023) and Jamilah et al. (2021), who noted that despite the challenges teachers faced when integrating digital media, the resilience and willingness to embrace change are indicative of the risk-taking mindset. It is suggested that this mindset not only enhance the teachers' technological skills but also improve students' learning experiences.

Learning Through Experiences on Risk-Taking

This sub-theme explores the participants' perspective on the role of performance risk-taking in fostering learning among the teachers. The findings illustrate how risk-taking enables teachers to navigate challenges, embrace creativity, and innovate their teaching practices. SM_N2 expressed, *"I believe we (teachers) have to take performance risks because we'll always encounter challenges during online classes. It is our responsibility to find solutions."* Similarly, SM_S1 emphasized, *"Taking risks is important to know our capability. It is important to learn what is right and wrong, as well as good and better options."* Expanding this idea, SM_S2 noted that *"...we will learn new things from that experience (of taking performance risk) because it is something that we are not used to doing."*

Primary school teachers also highlighted that engaging in risk-taking while learning to use digital platforms empowers them to share their knowledge and benefits to other colleagues. For instance, SR_C1 stated, *"I conducted tutorials for my colleagues on the use of applications and websites for my classes. They found it doable and easy to understand. I think I did well."* SR_EM2 added, *"As a PBD coordinator, I learned how to utilize Google Spreadsheet and Google Drive and shared them with other teachers. They can easily record their lessons."* Similarly, In a similar vein, SR_N1 remarked, "During the pandemic, I took the opportunity to learn how to use Google Classroom and conducted workshops for other teachers, even it is difficult."

The importance of risk-taking among teachers is acknowledged by school administrator, even if initially intimidating. One administrator noted, *"Teachers may feel hesitant about adopting new technologies, fearing mistakes or data loss. However, in my view, we must take risks and embrace change. If we don't take risks and embrace change, we will never discover our true potential."* A parent on the hand expressed support for teachers taking risks while emphasizing the need for collaboration and proper infrastructure. P17 explained that *"Teachers need to take risks, collaborate, and have adequate facilities. Without proper resources, it's challenging to assess and manage the risks we face."*

The findings from the participants' experiences underscore the critical role that performance risk-taking in enhancing teachers' digital learning agility. Teachers expressed that taking risks is essential for adapting in unforeseen conditions. This is because the willingness to embrace challenges is a proactive approach to problem-solving in the face of adversity. This sentiment is echoed in the literature, where Swanson, Brock, Sickle, Gutshall, & Curby (2022) emphasize that teacher self-efficacy significantly influences engagement with learning opportunities. When teachers feel capable, they are more likely to seek out and embrace new challenges, thereby enhancing their digital learning agility. Besides, it is notable that taking risks allows the teachers to discover their capabilities and learn from unfamiliar situations. This aligns with the findings of Howard (2017) who argued that risk-taking is fundamental to develop creativity and pedagogical innovation in the classroom. By stepping outside of comfort zone, teachers can acquire new skills and insights that can contribute to their adaptability in rapidly changing educational landscape.

Conclusion

In conclusion, this study emphasizes the important role of performance risk-taking in shaping teachers' digital learning agility. It underscores that teachers' willingness to take risks, such as experimenting with unfamiliar digital tools, is essential for enhancing their adaptability in

mastering digital technologies. This readiness to face challenges not only fosters resilience and creativity but also supports innovation, allowing teachers to effectively integrate technology into their teaching practices. The interviews with teachers, administrators, and parents reveal that performance risk-taking is instrumental in supporting professional growth, human well-being, and collaboration, elements that are vital for navigating the complexities of digitalization in education. Ultimately, the findings affirm that performance risk-taking is not just a reaction to challenges but serves as a catalyst for professional empowerment among the teachers.

Consequently, this study offers meaningful recommendations for teachers, policymakers, and educational institutions to foster a culture of risk-taking. The findings of this study may serve as a basis for a more extensive investigation that could provide insights for the development of policies and initiatives aimed at guiding teachers to be digitally agile. In order to foster a culture of innovation in education, it is essential to implement comprehensive professional development programs that provide structured training for teachers, allowing them to explore and experiment with digital tools in a supportive, low-risk environment. This approach not only builds their confidence in embracing new technologies but also encourages a mindset geared towards innovation. Furthermore, institutional support and incentives are crucial; schools should establish policies that recognize and reward educators who take risks in their digital teaching practices, thereby cultivating an atmosphere where experimentation is valued over the fear of failure. Collaborative learning networks can significantly enhance this environment by promoting peer mentoring, knowledge-sharing platforms, and digital learning communities, enabling teachers to exchange experiences and best practices in digital education. Additionally, adequate resource allocation and robust infrastructure are vital; schools must be equipped with the necessary technological resources and continuous IT support to alleviate the challenges teachers face when integrating digital tools into their classrooms. Finally, it is imperative to integrate these elements into national education frameworks, aligning digital learning agility and performance risk-taking with national policies, and embedding them into teacher evaluation frameworks and curriculum design. This holistic approach not only empowers educators but also enriches the learning experience for students, ultimately leading to a more innovative and effective educational landscape.

While this study makes significant contributions to our understanding of performance risk-taking in digital learning agility, it is important to acknowledge its limitations. Firstly, the research is based on qualitative data drawn from a specific educational context, which may restrict the broader applicability of the findings. To enhance the generalizability of the results, future studies could consider employing mixed-method or longitudinal approaches, which would provide a more nuanced and comprehensive perspective on the dynamics of performance risk-taking within digital learning environments. Secondly, the focus of this study is primarily on teachers in Malaysian public schools; expanding the research to include private schools or diverse cultural contexts could reveal whether similar patterns of risk-taking behavior are present across various educational settings. Furthermore, examining the influence of institutional policies and the availability of digital infrastructure on teachers' attitudes towards risk-taking could yield valuable insights for policymakers and educational leaders, informing strategies that support educators in their digital endeavors.

By addressing these identified gaps, future research has the potential to refine and enhance strategies aimed at improving digital learning agility, ultimately equipping teachers with the necessary tools and confidence to thrive in the ever-evolving landscape of education.

Acknowledgements

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