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Reconnoitering Innovative Ideas in Postnormal Times

iTAC

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iTAC 2023
INTERNATIONAL TEACHING AID COMPETITION
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PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee
Special Interest Group, Public Interest Centre of Excellence (SIG PICE)
UiTM Kedah Branch
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A CASE STUDY OF PROMOTING CONTINUOUS IMPROVEMENT IN SCHOOL LEADERSHIP THROUGH DIGITAL SELF-ASSESSMENT TOOLS: MYSKILLSCAN

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ABSTRACT
Self-assessment is an essential tool for educational leaders as it allows them to identify their strengths and areas for improvement. Educational leaders who engage in self-assessment gain valuable insights into their competencies and skills, which can help them develop strategies for enhancing their performance. This involves analyzing different aspects of educational management, such as planning, understanding student and teacher psychology, self-organization, time management, coordinating organizational activities, the impact on student learning, motivation and development of teachers, team building, and leadership skills. To evaluate the competency level of educational leaders, an innovative self-assessment tool has been developed, which includes five levels ranging from no experience to exceptional expertise. The tool presents an interactive spider-web visualization based on the leaders' responses, allowing them to assess their skills and competencies in various aspects of educational management. The tool has been quantitatively and qualitatively pilot-tested with a select group of ten leaders and proved effective in providing valuable insights into their skills and competencies, helping them identify areas for further development. There are three emerging themes , 1) self-awareness, 2) constructive feedback, and 3) meaningful interaction, to form a main theme that is continuous improvement based on the interview findings. In conclusion, this self-assessment tool can serve as a starting point for educational leaders to identify their strengths and weaknesses in this area, develop strategies for enhancing their skills, and ultimately improve overall educational outcomes. For further exploration, the tool can be considered for wider implementation in educational management practices.

Keywords: MySkillScan, Leadership, Educational Management Practices, Innovative Self-Assessment

INTRODUCTION

According to the latest Eurobarometer survey, digitalization has been perceived by the majority of respondents as having a positive impact on various aspects of society. Specifically, 75 percent of respondents believe that digitalization has a positive impact on the economy, while 67 percent and 64 percent believe that it has a positive impact on the quality of life and society, respectively (European Commission, 2017). The increasing prevalence of digital technologies in people's daily lives and businesses has led to significant transformations. These technologies

have facilitated the connection of over 8 billion devices globally (World Economic Forum, 2018) and have changed the way information is valued and managed. Furthermore, digitalization has begun to alter the nature of organizations, their boundaries, work processes, and relationships (Davenport and Harris, 2007; Lorenz et al., 2015; Vidgen et al., 2017).

The utilization of digital technologies for leadership and management has become increasingly prevalent in recent years. For example, mobile applications have the potential to provide a platform for individuals to monitor their leadership practices and to make informed decisions about their skills. Furthermore, the acceptability of these tools may play a crucial role in predicting their continued use. Despite the growing popularity of mobile leadership apps, limited research has been conducted to examine their perception and acceptability over time. This includes the factors and features that influence self-assessment, as well as the barriers that users may encounter while utilizing these apps. Additionally, there is a lack of understanding about how mobile leadership apps can be used.

Given these gaps in knowledge, this study aimed to provide an in-depth understanding of the acceptability of a mobile app for leadership self-assessment. Specifically, the study sought to explore users' perceptions with the app. Through a detailed examination of user feedback and engagement with the app quantitatively and qualitatively, the study sought to identify factors that promote or hinder the acceptability of these tools. Additionally, the study aimed to shed light on how leaders can be incorporated into the use of this application to enhance their effectiveness. By providing insight into the acceptability of mobile apps for leadership, this study has the potential to inform the development of future interventions and to improve the quality of professional trainings for leaders.

LITERATURE REVIEW

In recent years, innovative self-assessment techniques have gained significant attention in the literature as a means of enhancing learning outcomes and promoting critical thinking. Numerous studies have focused on the development and implementation of innovative self-assessment techniques, exploring their impact on various educational contexts. Educational leaders are responsible for creating and realizing their vision, encouraging their followers to work towards achieving a common goal (Church & Rotolo, 2015). Effective leaders must be able to conduct an accurate assessment of their strengths and weaknesses and take corrective measures to bolster their strengths and overcome their weaknesses. Self-aware leaders can assess their professional and personal development and identify areas for improvement. They can then create a plan of action for the future, identifying areas for growth and development to achieve professional success.

In addition, successful leaders must possess exceptional emotional and personal characteristics

such as diplomacy, leading by example, and empathy. Inspirational leaders place a heavy emphasis on developing their interpersonal and emotional skills in order to gain acceptance as leaders (Bashir, 2019). The literature suggests that innovative self-assessment tool has the potential to enhance professional learning outcomes and promote critical thinking in various educational and professional contexts. The studies discussed in this literature review highlight the importance of innovative self-assessment tools such as self-reflection, peer evaluation, open communication channels, and continuous feedback in enhancing skills and promoting innovation. These tools provide useful insights for educators, professionals, and researchers interested in developing and implementing innovative self-assessment, particularly for leaders.

In conclusion, innovative self-assessment techniques can enhance learning outcomes and promote critical thinking by empowering individuals to assess their strengths and weaknesses and identify areas for improvement. Successful leaders must possess exceptional emotional and personal characteristics, and innovative self-assessment techniques can aid in their personal and professional development. The use of innovative self-assessment tools can help educators, professionals, and researchers promote innovation and enhance learning outcomes in various educational and professional contexts.

METHODOLOGY

This study adopted a qualitative descriptive design to gain insight into the experiences of school leaders using the MySkillScan app. The participants were recruited from primary school settings. This study employed semi-structured in-depth interviews as the primary data collection method, conducting a total of ten interviews. The transcripts of the interviews were analyzed using qualitative thematic analysis, a systematic and rigorous approach to examine the data and develop themes. The interpretation of these themes was guided by a theory of acceptability (Nielsen, 1993). To facilitate the analysis process, the study employed NVivo 11 Pro, a software program designed for qualitative data analysis. Overall, the study aimed to provide an in-depth understanding of the acceptability of a digital leadership self-assessment app among school leaders.

FINDINGS

The following table presents the demographic findings of this study conducted on a sample of ten highly experienced school leaders. Gender data were available for all participants, with 70% identifying as female and 30% as male. Participants were drawn from both primary schools. The experiences of the participants varied widely, as outlined in Table 1, with the majority of participants (70%) having five to ten years of experience in the field.

Table 1. Experiences of the Participants

Year of Experience	n	Percentage
0-5 years	2	20%
6-10 years	7	70%
11-15 years	1	10%
More than 15 years	0	0%
Total	10	100%

Based on the findings, the main theme of this study was the continuous improvement of school leadership, which is supported by three emerging themes. The first theme pertains to the promotion of self-awareness, which is facilitated by the use of an app that enables school leaders to access their skills and knowledge. The second theme is concerned with the constructive feedback, which can be achieved through a spider-web visualisation generated by the app based on participants' responses. The third theme centers around meaningful interactions, which can be facilitated by the use of the app to foster communication and collaboration between school leaders and other stakeholders. These three themes are interconnected and form a circular process of continuous improvement of school leadership, whereby the app helps leaders in becoming more self-aware, visualizing their skills and knowledge, and engaging in meaningful interactions, ultimately leading to improvements in their leadership abilities. The circular process is illustrated in Figure 1.
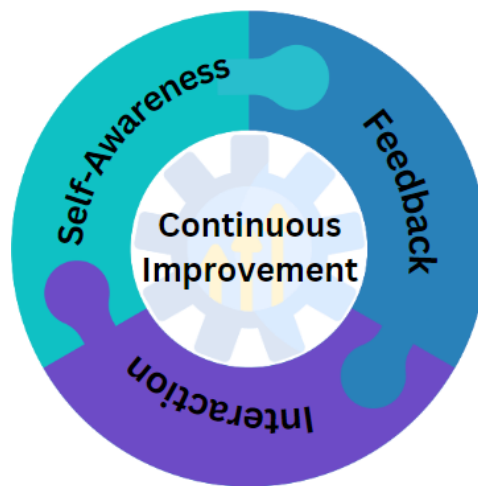

Figure 1. Continuous Improvement of School Leadership via MySkillScan

Continuous Improvement of School Leadership

Based on the interview findings, this theme suggests that the use of a digital tool can support school leaders in their continuous improvement process. The digital tool can be used to identify

areas for improvement, track progress, and engage in ongoing learning and development activities. The theme indicates that the app can support leaders in their efforts to improve their leadership skills and abilities over time.

Promotion of Self-Awareness

This theme relates to the use of the digital tool to promote self-awareness among school leaders. The app provides leaders with the opportunity to reflect on their skills and knowledge, identify areas for improvement, and set goals for personal and professional development. By promoting self-awareness, the app can support leaders in their efforts to improve their leadership effectiveness and overall performance.

Constructive Feedback

This theme suggests that the digital tool can be used to visualize leaders' skills and knowledge. The app provides a spider-web visualisation that enables leaders to see their strengths and weaknesses in different areas of leadership. This visualization can help leaders identify areas for improvement and develop targeted strategies to enhance their leadership effectiveness.

Meaningful Interactions

This theme relates to the use of the digital tool to facilitate meaningful interactions between school leaders and other stakeholders. The app can support leaders in engaging with other stakeholders, such as teachers, parents, and community members, to collaborate on improving the school's performance. By facilitating meaningful interactions, the app can support leaders in their efforts to improve the school's overall performance and effectiveness.

DISCUSSIONS

The use of digital self-assessment tools has been found to contribute significantly to the continuous improvement of school leadership. A study conducted on this topic revealed three themes that support this finding. Firstly, self-awareness, where leaders were able to access their skills and knowledge through the use of the MySkillScan tool, leading to a more reflective and growth-oriented approach to leadership. This finding aligns with previous studies that have emphasized the importance of self-awareness for leadership development (Day et al., 2014). The second theme, constructive feedback, was also found to be important. The spider-web visualization provided by the MySkillScan tool allowed leaders to visualize their skills and knowledge, which can be a powerful motivator for continuous improvement. This finding aligns with previous studies that have emphasized the importance of feedback and reflection in

leadership development (Ladkin & Taylor, 2010).

Furthermore, the third theme, meaningful interactions, emphasizes the importance of collaboration and communication between leaders and other stakeholders. The MySkillScan tool can facilitate these interactions by providing a common language for discussing leadership skills and knowledge. This finding aligns with previous studies that have highlighted the importance of communication and collaboration in leadership development (Day et al., 2014; Avolio & Yammarino, 2013). In conclusion, the study findings suggest that the use of a digital self-assessment tool such as the MySkillScan can be an effective way to promote continuous improvement in school leadership. The themes that emerged from the analysis highlight the importance of self-awareness, visualization of skills and knowledge, and meaningful interactions in promoting continuous improvement. These findings have implications for leadership development programs and suggest that the use of self-assessment tools can be an effective way to promote continuous improvement in school leadership.

CONCLUSION

In conclusion, this article suggests that the use of digital self-assessment tools, such as MySkillScan, can be effective in promoting continuous improvement in school leadership (Lapointe et al., 2021). The study highlights the importance of self-awareness, visualization of skills and knowledge, and meaningful interactions in contributing to continuous improvement. These findings are consistent with previous research indicating that self-assessment and reflection can contribute to leadership development (Day et al., 2018). The implications of these findings for leadership development programs are significant. By incorporating self-assessment tools into their programs, educators and administrators can encourage a reflective and growth-oriented approach to leadership. This approach can help leaders identify areas for improvement, set goals, and continuously monitor their progress.

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