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RESEARCH ARTICLE

WHERE ARE WE AND WHERE ARE WE GOING: EDUCATIONAL INNOVATION INITIATIVES IN SAN PABLO COLLEGES

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ABSTRACT

This study explored the relationship between employees' attitude, values, intentions, and readiness towards innovation. The study employed a mixed-methods design with a sample of 70 employees from various departments of San Pablo Colleges including teachers, non-teaching staff and administrators. The participants completed a survey to assess their attitude, values, intentions, and readiness towards innovation. A focused-group discussion involving 13 employees was also conducted to ascertain directions as regards innovation efforts of the college. The results showed that employees' positive attitude, strong values and intentions, and high level of readiness towards innovation were positively correlated. Specifically, employees who had a positive attitude towards innovation also had strong values that aligned with the innovation goals and were more likely to intend to participate in the innovation initiatives. Furthermore, employees who had a high level of readiness for change were more likely to have positive attitudes, strong values, and intentions to participate in the pursuits for innovation. Based on the focused-conversation results, SPC is considering 3 priority innovation areas: Teaching and Learning Innovation; Social-Ecological Innovation; and Technology and Governance Innovation.

KEYWORDS

Innovation initiatives, attitudes and behaviors, mixed-method design

1. BACKGROUND

In recent years, there has been an increasing focus on educational innovations as a means of improving student learning outcomes and promoting educational equity. From technological innovations such as the use of digital platforms and learning management systems, to pedagogical innovations, such as project-based learning and inquiry-based approaches, educators are experimenting with new methods and approaches to enhance the educational experience for learners (Kumar, 2008).

However, while educational innovations have the potential to yield significant benefits, they also present challenges in terms of implementation, sustainability, and scalability. To address these challenges, it is important to conduct a thorough assessment of the desired outcomes of educational innovations and the capacity of educational institutions to implement and sustain them (Kumar et al., 2023).

The purpose of this paper is to explore the current innovation efforts and assess the capacity of SPC to successfully implement and sustain educational innovations in promoting student learning outcomes and educational equity. The expected outcomes of this study include a comprehensive understanding of the desired outcomes of educational innovations and the capacity of educational institutions to implement and sustain them. This understanding will inform the development of strategies and recommendations for enhancing the capacity of educational institutions to support the successful implementation and sustainability of educational innovations. Ultimately, this study aims to contribute to the ongoing dialogue on educational innovations and their potential to transform the educational landscape.

2. REVIEW OF RELATED LITERATURE

Innovations are happening in a wide array of forms. Curriculum innovation refers to the intentional design of new educational programs or updates to existing ones to align with changing learning needs and outcomes (Schiro, 2013). It often involves rethinking what and how students learn, incorporating interdisciplinary approaches, and integrating real-world applications (Biesta, 2012). Pedagogical innovation refers to the development and implementation of new teaching methods and strategies to enhance student engagement and learning outcomes (Anderson and Dron, 2012). It emphasizes learner-centered approaches, active learning, and the integration of technology. Assessment innovation involves designing new methods for evaluating student learning and performance. It emphasizes formative assessment, competency-based evaluation, and the use of technology to enhance assessment practices (Black and Wiliam, 1998).

Another form of innovation is environmental innovation. It involves developing new technologies, practices, and policies to address environmental challenges and promote sustainability (Cohen and Levinthal, 1990). It encompasses areas such as renewable energy, waste reduction, green technologies, and sustainable resource management. Further, social innovation aims to find novel solutions to societal problems by addressing the needs of individuals and communities (Mulgan et al., 2007). It often involves collaborations between various stakeholders and focuses on creating positive social impact (Phills et al., 2008).

Technological innovation encompasses the development and application of new technologies to create novel products, services, or processes (Dosi, 1988). It plays a significant role in various fields, including education, healthcare, communication, and manufacturing. Administrative

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innovation involves implementing new organizational structures, processes, and practices to improve efficiency and effectiveness. It often focuses on streamlining operations, optimizing resource allocation, and enhancing decision-making (Birkinshaw and Mol, 2006).

In the field of education, innovations have gone a long way. The integration of technology into education has been a transformative force. Blended learning models, combining traditional classroom teaching with online resources, have gained popularity (Garrison and Kanuka, 2004).

Anderson and Dron (2012) discussed the concept of "connectivism," which emphasizes the role of networks and technology in facilitating learning. The flipped classroom model involves reversing traditional teaching methods, with students engaging in content outside class and using class time for discussions and activities (Bergmann and Sams, 2012). Open Educational Resources (OER) and Open Pedagogy came into play. OER are freely accessible educational materials (Wiley and Green, 2012). Open pedagogy encourages student contribution and remixing of content (Hegarty, 2015).

Another innovation came in the form of gamification which involves applying game elements to non-game contexts to enhance engagement and motivation (Deterding et al., 2011).

Serious games, which combine entertainment with educational goals, have been explored in various domains (Gee, 2003). Adaptive learning systems use data and algorithms to tailor instruction to individual learners (Murray, 2011). Personalized learning aims to address diverse student needs and interests (Pane et al., 2015). Another innovation is design thinking. In the education, it pertains to a problem-solving approach emphasizing empathy, iteration, and user-centered design (Brown, 2008). It has been applied to curriculum design and educational reform.

3. Methods

This study employed a mixed-methods approach, combining qualitative and quantitative data collection and analysis techniques. The qualitative component involved a systematic review of the literature on educational innovations, with a focus on identifying the desired outcomes of different types of innovations and the factors that contribute to their success or failure. The quantitative component involved a survey of a total of 70 SPC teaching and non-teaching employees' attitude, values, intentions, and readiness to implement and sustain educational innovations. It likewise explored, through a focused conversation with 13 participants, the current innovation initiatives happening in the institution with the aim of streamlining them and ascertaining future directions.

4. Results and Discussion

Tables 1-4 show the attitudes, values, intentions and readiness for innovation of San Pablo Colleges teaching and non-teaching staff.

Table 1: San Pablo Colleges Employee's Attitude Towards Innovation

Indicators	MEAN	VD/I
1. I am excited by the prospect of exploring new and innovative ideas.	3.73	SA
2. I believe that innovation is a critical component of success in today's world.	3.73	SA
3. I see challenges as opportunities to develop and implement innovative solutions.	3.57	SA
4. I enjoy working on projects that require creative problem-solving.	3.44	SA
5. I am motivated to find new and innovative ways to improve my personal and professional life.	3.63	SA
6. I believe that innovation can lead to meaningful and positive change.	3.75	SA
7. I am willing to challenge the status quo in order to pursue innovative solutions.	3.51	SA
8. I am open to new and diverse perspectives that can inform my innovative efforts.	3.65	SA
9. I believe that innovation requires willingness to take risks & accept failure as part of process.	3.70	SA
10. I am eager to learn and develop my innovative skills.	3.75	SA
Composite Mean	3.65	VHP

Table 1 shows that the SPC employees have highly positive attitudes towards innovation based on the composite mean value of 3:65. The indicators that got the highest mean value of 3.75 say that employees believe that innovation can lead to meaningful and positive change and that they are eager to learn and develop my innovative skills. Such positive regard toward innovation is indicative of their openness to relevant initiatives the institution may undertake in its pursuit to innovate. These findings conform to that of that teachers' attitudes towards innovation is crucial to the implementation of innovative practices in the classroom (Cheung and Slavin, 2016). Teacher collaboration and support are important factors in influencing positive attitudes towards innovation. Teachers' beliefs about the value and feasibility of innovation significantly impact their attitudes and implementation of innovative practices.

Table 2 presents that the SPC employees have highly positive value towards innovation based on the composite mean value of 3.65. The indicators that got the highest mean value of 3.73 says that employees believe that innovation requires continuous learning and development. This is followed by the indicators that got the mean value of 3.73 claiming that employees regard innovation to be requiring both creativity and strategic thinking and they believe that innovation can bring positive change in the society. These finding connote that SPC is in a good position in terms of implementing efforts to innovate considering the innate values its employees have. A study of explored how continuous learning practices among professionals contribute to fostering innovation within organizations (Bélanger et al., 2019). The study highlights the importance of ongoing learning, skill development, and knowledge sharing for enhancing individual and organizational innovative capabilities. It also provides insights into the role of human resource development in promoting a culture of continuous learning and innovation within workplaces. The investigated how various learning activities, such as training programs, knowledge sharing, and experimentation, contribute to fostering innovation (Albers et al., 2019). Their article provides insights into the theoretical and practical implications of continuous learning for promoting innovative behavior and organizational performance.

Table 3 shows that the SPC employees have highly positive intentions towards innovation based on the composite mean value of 3.48. The indicator that got the highest mean value of 3.62 says that employees intend to continually improve their innovative skills and knowledge followed by the indicator (m=3.57) that says that employees intend to pursue innovative solutions to problems in their personal and professional life. The manifested intentions of the employees speak about their strong desire to innovate investigated the relationship between employees' continuous learning, psychological capital, and innovation performance (Chen and Zhu, 2019). They proposed that continuous learning positively influences employees' innovation performance and that psychological capital plays a mediating role in this relationship. The findings highlight the importance of fostering continuous learning opportunities and developing employees' psychological capital to enhance their innovative skills and performance within organizations. Moreover, examined and synthesized findings from a wide range of studies and identified the key factors that influence teachers' intention to innovate (Venkatesh et al., 2012). They posited the implications of promoting technology integration in teaching and learning environments for educational practitioners and policymakers.

Table 2: San Pablo Colleges Employee's Value of Innovation		
Indicators	MEAN	VD/I
1. Innovation is a key value that drives my personal and professional life.	3.59	SA
2. I believe that innovation can bring positive change to society.	3.73	SA
3. I am willing to challenge conventional wisdom in order to find innovative solutions.	3.51	SA
4. I believe that innovation requires continuous learning and development.	3.78	SA
5. I am willing to collaborate with others to generate new ideas and approaches.	3.60	SA
6. I think it is important to be proactive in identifying and pursuing innovative opportunities.	3.63	SA
7. I believe that innovation should be guided by ethical principles and social responsibility.	3.71	SA
8. I am willing to consider& experiment with ideas that may initially seem risky.	3.54	SA
9. I believe that innovation requires a willingness to fail and learn from mistakes.	3.67	SA
10. I think that innovation requires both creativity and strategic thinking.	3.73	SA
Composite Mean	3.65	VHP

Table 3: San Pablo Colleges Employee's Intentions Towards Innovation		
Indicators	MEAN	VD/I
1. I intend to pursue innovative solutions to problems in my personal and professional life.	3.57	SA
2. I have specific goals related to innovation that I am actively working towards.	3.43	SA
3. I am actively seeking out new information and knowledge to fuel my innovative efforts.	3.44	SA
4. I am willing to allocate time, resources, and effort towards pursuing innovative ideas.	3.49	SA
5. I am actively seeking out opportunities to collaborate with others on innovative projects.	3.43	SA
6. I intend to implement innovative solutions in my work or personal life within the next year.	3.46	SA
7. I am confident in my ability to generate and implement innovative ideas.	3.44	SA
8. I intend to share my innovative ideas and solutions with others.	3.52	SA
9. I am willing to take calculated risks in order to pursue innovative solutions.	3.37	SA
10. I intend to continually improve my innovative skills and knowledge.	3.62	SA
Composite Mean	3.48	VHP

Table 4: San Pablo Colleges Employees' Readiness for Innovation		
Indicators	MEAN	VD/I
1. I have the necessary skills and knowledge to innovate in my personal and professional life.	3.35	SA
2. I am prepared to take on the challenges that come with pursuing innovative solutions.	3.33	SA
3. I am comfortable with uncertainty and ambiguity, which are common in the innovation process.	3.27	SA
4. I have access to the resources and support I need to pursue innovative ideas.	3.19	A
5. I am able to adapt quickly to changing circumstances in order to pursue innovative solutions.	3.43	SA
6. I am able to think creatively and generate new ideas.	3.43	SA
7. I am able to effectively communicate and collaborate with others in order to pursue innovative solutions.	3.40	SA
8. I have a positive attitude towards innovation and am open to new and diverse perspectives.	3.59	SA
9. I am able to identify and evaluate the potential risks and benefits of pursuing innovative solutions.	3.37	SA
10. I am able to overcome obstacles and persist in the face of challenges when pursuing innovative solutions.	3.38	SA
Composite Mean	3.37	VHP

Table 4 presents the SPC employees' readiness to innovate. Based on the composite mean value of 3.37, though found to be lowest among the composite mean values, it still verbally interpreted as very much ready. The indicator that got the highest mean value of 3.59 says that the employees have positive attitude towards innovation and am open to new and diverse perspectives. This is followed by the indicators that got the mean value of 3.43 claiming that they have the ability adapt quickly to changing circumstances in order to pursue innovative solutions and they are capable to think creatively and generate new ideas. Such expression of readiness to innovate puts the institution in an advantageous position to pursue innovation efforts. However, it is noteworthy that the indicator that got the lowest mean value of 3.19 says that employees have access to the resources and they feel that have the support they need to pursue innovative ideas. The identified key factors that contribute to employees' readiness for change, such as organizational support, communication, participation, leadership, and individual characteristics (Armenakis et al., 2007).

Statistical analysis showed that there is positive and significant relationship among attitude, values, intention, and readiness towards innovation. The data analysis revealed that individuals with more positive attitudes towards innovation were more likely to have stronger intentions to engage in innovative behaviors. Similarly, employees who held innovation-supportive values demonstrated higher levels of readiness for innovation. The correlation coefficients between attitude, values, intention, and readiness were all found to be statistically significant, providing evidence for the interconnectedness of these constructs.

The findings of the study support the notion that attitude, values, intention, and readiness are important factors influencing individuals' engagement in innovation. The positive relationship between attitude and intention suggests that individuals who have a favorable view of innovation are more inclined to translate their positive attitudes into actual intentions to innovate (Johnson et al., 2020). Moreover, the positive association between values and readiness indicates that individuals who prioritize and embrace innovation as a core organizational value are more likely to be prepared and open to innovative initiatives (Chen et al., 2017).

These results align with previous research highlighting the significance of psychological factors in promoting innovation within organizations. The presence of positive attitudes and innovation-supportive values can foster a culture of innovation, where employees are more willing to explore new ideas, take risks, and contribute to the development and implementation of innovative solutions (Albers et al., 2019).

The findings also emphasize the importance of fostering a supportive environment that encourages and nurtures innovative thinking and behavior. By understanding the role of attitude, values, intention, and readiness, organizations can design interventions and initiatives to promote a positive innovation climate, such as providing training and resources to enhance employees' skills and knowledge, creating platforms for idea sharing and Collaboration, And Recognizing And Rewarding Innovative Contributions.

5. Conclusion

5.1 Where we are now?

Based on the focused conversation conducted, as the participants explored

on the current standing of San Pablo Colleges on the different areas of innovation, the following findings emerged. The most subscribed innovation areas are pedagogical, assessment and curriculum. The participants agreed that efforts are being done to innovate pedagogies through implementation of blended learning modality, active learning, flipped classroom, project- based and inquiry-based learning, service learning, gamification and game-based learning. As regards assessment innovation, participants are one in the claim that teachers, in varying capacities, employ performance-based assessments, authentic assessments, peer assessments, self-assessments, digital assessments, and competency-based assessments. As regards curriculum innovation, the participants are one in saying that evidences are present to claim that the following innovations are in place: competency-based education, project-based learning, hybrid learning models, experiential learning, global education, STEM education, social and emotional learning, and environmental education. However, the conversation pointed out that the least implemented innovation efforts is on environmental innovation.

Looking into the perceived importance of each innovation area, the participants identified curriculum, pedagogical and technological as the most important innovation areas, respectively. The one that is perceived to be the least important is the assessment innovation. Moreover, the innovation areas that are perceived to be requiring least effort to pursue include pedagogical, organizational and curriculum innovation areas, respectively. Moreover, the environmental innovation is regarded as the one requiring most effort.

5.2 Where are we going?

Considering the least subscribed innovation area, further discussion among the participants lead to the realization to include environmental innovation as one of the institution's priority areas, together with curriculum innovation which is regarded as most important and pedagogical innovation which is perceived to be requiring least effort and most subscribed innovation area. If the institution is to add one more innovation area to prioritize, strategically, it should be organizational innovation based on its standing in terms of current efforts, perceived importance and the perceived effort required.

Further, should the institution strive to strengthen all seven innovation areas, the participants recommend to combine curriculum innovation (as the perceived most important area) with pedagogical innovation (the one perceived to require least effort and currently most practiced) and assessment innovation (the one perceived to be least important) as Priority Area 1 to be dubbed as *Teaching and Learning Innovation.* Subsequently, environmental and social innovations (being the least subscribed areas) as Priority Area 2 to be dubbed as *Social-Ecological Innovation*. Finally, combining organization and technological innovations as Priority Area 3 to be dubbed as *Technology and Governance Innovation.*

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