Developing a Conceptual Framework for Excellent School Management For Enhancing Students' Creative Self-Efficacy[*]

[1]Dalin Lim, Chayapim Usaho and Nipachcha Rojratanavanit

[1]Faculty of Education, Chulalongkorn University, Thailand.

[1]Corresponding Author's Email: dalin_lim@ymail.com

Abstract

Creative self-efficacy, the belief in one's ability to generate new ideas or outcomes, has impacted students' creativity and creative performance. It is vital to structure excellent school management to enhance students' creative self-efficacy in today's education to strengthen creativity and respond to today's needs. This study aims 1. to study the framework of creative self-efficacy and excellent school management and 2. to develop a conceptual framework for excellent school management to enhance students' creative self-efficacy. The developed frameworks are vital resources for formulating school administration to increase students' creative self-efficacy, creativity, and innovation. Also, directors, teachers, or researchers use the framework for further study to improve creativity and innovation in education. The investigation began with a review of related concepts, research, and literary works, then synthesized to form the frameworks of creative self-efficacy, excellent school management, and excellent school management in enhancing students' creative self-efficacy. Four experts were purposively selected to evaluate and confirm the frameworks. The data were analyzed using descriptive statistics as mean, percentage, and content analysis.

The findings indicated that 1. The framework of creative self-efficacy comprised of creative thinking self-efficacy (fluency, flexibility, originality, and elaboration self-efficacy) and creative performance self-efficacy (field, personality, and persistence self-efficacy); and the framework of excellence school management comprised of leadership; strategy; students and stakeholders; measurement, analysis, and knowledge management; workforce (teacher and academic staff); operation; and results. 2. The conceptual framework for excellent school management to enhance creative self-efficacy integrates the frameworks of excellent school management and creative self-efficacy.

Keywords: conceptual framework; creative self-efficacy; excellent school; management; enhance

---

Introduction

Creativity has been viewed as a needed skill for today (Kaufman, and Sternberg, 2019) and the future workforces (World Economic Forum, 2018). Sir Ken Robinson, an education expert, noted that "creativity is as important now in education as literacy" (Fitzgerald, 2021). It is a critical capacity that helps people create new ways of solving problems, facing difficulties, strengthening connections, making new products and ideas (Gallup, 2019), and driving innovation (Rabbani, Sarmad, Khattak, and Khan, 2020) for the unpredictable world. Also, creativity helps to promote both academic achievement and success outside the classroom (Huang, Krasikova, and Liu, 2016). Without creativity, one will be left behind. Today, many governments all around the globe have highlighted creativity as a cornerstone in their formal education (Bolden et al. 2020; Craft, 2010; Fullan, and Langworthy, 2014). They focused on how children and young people can develop the essential creative skills as part of their education to respond to future life and the workforce's need.

Attention to enhancing creativity in education, research revealed that there would not be any creativity or invention if there is a lack of belief in one's ability to work creatively (MEINEL, 2012). Creative self-efficacy is the main predictor of creativity (Kelley, and Kelley, 2013) and a crucial component of being creative-driven (Pretz, and Nelson, 2017). Growing long-term creativity, creative self-efficacy must be at risk (Puozzo Capron, and Audrin, 2021). The concept of creative self-efficacy was first defined as the individual's belief in their potential to generate innovative or creative outcomes (Tierney, and Farmer, 2002). Self-efficacy in creativity is the power to push individuals to strong performance the new or different ideas they have. Creative self-efficacy motivates people to work hard and continue creative endeavors (Gong, Kim, and Liu, 2020). Research from the classroom and the workplace explored creative self-efficacy as a critical forerunner of creative effort and performance (Mathisen, and Bronnick, 2009). Students are more likely to exhibit a pattern of idea generation if they feel they can achieve and see themselves as conceivably successful (Tep, Maneewan, Chuathong, and Easter, 2021). By contrast, those who do not trust in their abilities will not challenge the ordinary, explore new knowledge, or create innovative solutions or ideas (Gong, Kim, and Liu, 2020). They will fail to adapt to any difficulty they face in life and work. When Creative self-efficacy is developed, it encourages students to inspire change, continue advancement, and be creative in learning and working behaviors (Lee, and Kemple, 2014; Mathisen, 2011). Students will be motivated, think deeply, and break down boundaries of

uncertainty (Smith, 2019) they face. Self-efficacy in creativity fosters individuals to dare to think, share, and perform a variety of novel ideas or products.

Moreover, students with a high degree of creative self-efficacy are more self-assured and perceive issues and difficulties as opportunities (Sangsuk, and Siriparp, 2015). Students with low creative self-efficacy will be less open to the skills needed for creative engagement, less driven to participate in creative processes, and, as a result, less successful in creative achievement. (Rip, 2019).

When creative self-efficacy is viewed as necessary for students to enhance their creativity and well-being in facing a new challenge in the fast-changing world and future workforce, the researchers emphasized that creative self-efficacy was influenced by personal and environmental aspects (Park, Jang, Thomas, and Smith, 2021). However, Puente-Díaz (2016) explained that individual factors negatively affect creative self-efficacy; the link between schooling and creative self-efficacy is critical (Rip, 2019). Developing students' creative self-efficacy requires innovative teaching and creativity (Nemeržitski, and Heinla, 2020). Moreover, classroom environment (Tan, 2012); school quality, creative activities in school (Karwowski, 2015b); as well as the family environment (Wang et al. 2009 as cited in Tang, Hu, and Zhang, 2017) also have influence. What is the excellent school's administration framework that can influence students' creative self-efficacy? Studies found that children's creative self-efficacy develops at the age of ten (Karwowski, 2015a; Karwowski, and Barbot, 2016), yet it decreases as they grow (Beghetto, Kaufman, and Baxter, 2011). Land and Jarman demonstrated that kids scored 98% on creativity, but it went down to 30% when they were ten and to just 12% when they were 15 (Nascimento, 2017). How can schools manage to stop the decrease in students' creative self-efficacy?

The review infers that it is vital to study the framework of creative self-efficacy and excellence management to promote students' creative self-efficacy effectively. Also, the conceptual framework of excellent school management to encourage students' creative self-efficacy must be clearly defined and developed to get schools ready to prepare for their effective process. Thus, the current research studied the framework of creative self-efficacy and excellent school management; and developed the conceptual framework for excellent school management to enhance students' creative self-efficacy.

Objectives of the research

1. To study the frameworks of creative self-efficacy and excellent school management

2. To develop the conceptual framework for excellent school management for enhancing students' creative self-efficacy

Research Methodology

The study adopted a qualitative approach that was carried out in seven steps:

1st Step: Studied the related concepts, theories, and research studies about creative self-efficacy and management toward excellence of schools.

1. Creative self-efficacy

Creative self-efficacy was found to be studied in two features. Some researchers studied creative self-efficacy as the concept aroused from self-efficacy and creativity; others chose to look at one idea, "creative self-efficacy" (Chong, and Ma, 2010a). This study discussed creative self-efficacy as one concept necessary for enhancing individuals' creativity and creative performance. Creative self-efficacy was first defined as the belief that one can produce creative outcomes (Tierney, and Farmer, 2002). The belief influences a person's creativity and proclivity to participate in creative performance to accomplish their creative goals (Beghetto, and Karwowski, 2017). Also, creative self-efficacy is a predictor of mastery of creative objectives, a moderator of quality and origin person problem-solving solutions, and a mediator between optimism and innovative behavior (Farmer, and Tierney, 2017). Creative self-efficacy refers to students' belief in solving the required problem creatively and performing the given tasks creatively to create a novel and valuable idea or respond to the demand situation. It is also a confident and creative effort that motivates students to put all their talent and ability toward creative ideas, processes, or products.

Due to the importance of creative self-efficacy discovered, educational researchers choose to investigate the concept under multiple defined dimensions. Daniel (2010) explained that there are two main innovative self-efficacy structures: creative thinking self-efficacy and creative performance self-efficacy. Creative thinking self-efficacy consists of fluency, flexibility, elaboration, and originality. Creative performance self-efficacy consists of domain, field, and personality. Yu (2013), studying "An Empirical Examination of a four-component of creative self-efficacy among undergraduate students," suggested that creativity was associated with fluency, flexibility, originality, and elaboration self-efficacy. In a more recent study, Hung (2018)

and Liu et al. (2021) identified the dimensions of creative self-efficacy as creative thinking ability self-efficacy (CTSE), creative performance self-efficacy (CPSE), and persistence against social persuasion self-efficacy (ASPSE). Different dimensions of creative self-efficacy were defined in educational research; this study developed the dimensions of creative self-efficacy that should be developed in schools for this rapidly changing world by synthesizing the components of creative self-efficacy of the previous research (Table 1). Each dimension is required to flourish as part of the development school's excellence management process, which fulfills the demands of all corresponding sections.

2. Excellence management

Excellence school is the school in which the leaders lead teams, devise strategies, and deploy resources, systematically fed into clearly identified student-focus processes for which targets are set and performance monitored and managed (Ng, and Chan, 2008). Educational excellence is a collection of integrated organizational steps and procedures that schools use to attain growth in various areas (Faraj, 2018). In recent research, excellent school management is the continued success and development by improving the quality of the school's system (Rajitanon, 2019). The European Foundation for Quality Management (EFQM) defined excellence as having nine core dimensions: leadership, policy and strategy, people, partnership and resources, processes, customer outcomes, employer results, society results, and critical performance results (EFQM, 2021). The model is used in many factors, especially in business. However, in the education field, the Excellence Management framework of the Baldrige Performance Excellence was judged as an efficient instrument for providing a systematic method for generating and managing change in education (Brusoni et al. 2014) in-service and product to its customers, service users, or users stakeholders. The Baldrige Excellence framework indicates all related dimensions: Leadership; strategy; customer, measurement, analysis, knowledge management, workforce, operation, and results (Baldrige Performance Excellence Program, 2021). So, what are the criteria of excellent school management that can work to promote students' creative self-efficacy?

2nd Step: Analyzed, synthesized, and adapted the framework/dimensions of creative self-efficacy, excellent school management, and the conceptual framework for excellent school management for enhancing students' creative self-efficacy.

1. Creative self-efficacy

Table 1 A Synthesis of dimensions of Creative Self-Efficacy

Dimensions of Creative Self-Efficacy		Academic Researchers / Research Study (of)									Conceptual Framework for Creative Self-Efficacy
		(Abbott, 2010)	(Tan, and Majid, 2011)	(Shiu, Lin, and Chien, 2012)	(Yu, 2013)	(Liu et al. 2014)	Du et al. (2020)	(Daher, Gierdien, and Anabousy, 2021)	(Lin, and Wang, 2021)	(Hung, 2018; Liu et al. 2021)	
1.	Creative thinking self-efficacy	✓							✓		1. Creative thinking self-efficacy
	Belief in creative thinking strategy			✓		✓	✓				
	Efficacy of creative thinking									✓	
1.1	Fluency	✓			✓			✓			1.1. Fluency self-efficacy
	Fluency self-efficacy				✓						
	Idea generation		✓								
1.2	Flexibility	✓						✓			1.2. Flexibility self-efficacy
	Flexibility self-efficacy				✓						
1.3	Elaboration	✓						✓			1.3. Elaboration self-efficacy
	Elaboration self-efficacy				✓						
1.4	Originality	✓									1.4. Originality self-efficacy
	Originality self-efficacy				✓						
	Belief in Creative product			✓		✓	✓	✓			
2.	Creative Performance self-efficacy	✓								✓	2. Creative Performance self-efficacy
2.1	Personality	✓									2.1. Personality self-efficacy
2.2	Field	✓									2.2. Field self-efficacy
	Domain	✓									
	Creativity efficacy in persistence		✓								
	Persistence against social persuasion self-efficacy									✓	
2.3	The belief in negative evaluation resistance						✓				2.3. Persistence self-efficacy
	Persistence of efficacy in the face of negative feedback							✓			
	Creative self-efficacy feedback					✓					
	The belief of rival negative appraisal		✓								

According to the synthesis in table 1, the dimensions of creative self-efficacy defined in the study consist of creative thinking (fluency, flexibility, elaboration, and originality self-efficacy) and creative performance self-efficacy (personality, field, and persistence self-efficacy).

2. Management towards Excellence

The Baldrige Award defines "Excellence management" as an aligned approach to organizational performance management that continuously increases the value to consumers, contributes to present and future success, develops organizational effectiveness and capabilities, and corporate and personal growth. The excellent school management framework is a school management framework that can improve overall performance. The criteria of excellence in school management in the study were adopted from Baldrige Performance Excellence Program, consisting of 7 criteria: leadership; strategy; students and stakeholders; measurement, analysis, and knowledge management; teachers and academic staff; operation; and results.

3rd Step: Invited experts to evaluate and confirm the suitability of the frameworks

In the study, four experts were selected and invited; they were experts in creative self-efficacy, excellent educational management, educational psychology, and academic management. Each selected expert contained at least a Master's or Ph.D. degree and more than three years of experience in the relevant field. The invited experts for the evaluation and confirmed the suitability of the frameworks were selected with the purposive sampling method.

4th Step: Design a research instrument

The suitability evaluation form, research instrument, was designed in the form of a checklist by the researcher. The evaluation form was divided into three parts:

1. Demographic Data of experts

2. The evaluation of the suitability of the frameworks

    2.1. A framework of creative self-efficacy

    2.2. A framework of excellent school management

    2.3. A Conceptual framework for excellent school management for enhancing students' creative self-efficacy

3. Additional comments and suggestions on the frameworks

5th Step: Collected data for the suitability evaluation

Data were gathered through an online protocol, including emails and Telegram.

1. Emailed and telegrammed the suitability evaluation forms to the selected experts.

2. Evaluated and returned the evaluation results to the researcher by experts

6th Step: Analyzed the data of the suitability evaluation

When all experts returned the evaluation result to the researcher, the searcher analyzed the data by using descriptive statistics:

1. The framework evaluation was analyzed using mean and percentage.

2. The comments and suggestions were analyzed using the content analysis.

7th Step: Revised and developed the final framework and conceptual frameworks

1. Revised the frameworks based on experts' evaluation

2. Summited the revised frameworks to advisor and co-advisor for comments

3. Finalized the frameworks and conceptual frameworks

Research Results

The 1st objective of the research is to study the dimension of creative self-efficacy and excellent school management. The result revealed that the dimensions of creative self-efficacy and excellent school management were suitable in all elements. They contained evaluation values of 100% suitable for all elements.

Table 2 The suitability evaluation results in the dimension of creative self-efficacy and excellent school management

No	Dimensions	Suitable		Need Improvement		Not Suitable	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Creative Self-Efficacy							
1.	Creative thinking self-efficacy	4	100	-	-	-	-
	1.1. Fluency self-efficacy	4	100	-	-	-	-
	1.2. Flexibility self-efficacy	4	100	-	-	-	-
	1.3. Elaboration self-efficacy	4	100	-	-	-	-
	1.4. Originality self-efficacy	4	100	-	-	-	-
2.	Creative performance self-efficacy	4	100	-	-	-	-
	2.1. Field self-efficacy	4	100	-	-	-	-
	2.2. Personality self-efficacy	4	100	-	-	-	-
	2.3. Persistence self-efficacy	4	100	-	-	-	-
Excellent school management							
1.	Leadership	4	100	-	-	-	-
	1.1. Senior leadership	4	100	-	-	-	-
	1.2. Governance and societal contribution	4	100	-	-	-	-
2.	Strategy	4	100	-	-	-	-
	2.1. Strategy development	4	100	-	-	-	-
	2.2. Strategy implementation	4	100	-	-	-	-
3	Students and stakeholders	4	100	-	-	-	-
	3.1. Students' and stakeholders' expectations	4	100	-	-	-	-
	3.2. Students' and stakeholders' engagement	4	100	-	-	-	-
4	Measurement, analysis, and knowledge management	4	100	-	-	-	-

	4.1. Measurement, analysis, and improvement of school performance	4	100	-	-	-	-
	4.2. Information and knowledge management	4	100	-	-	-	-
5	Workforce (Teachers and Educational Staff)	4	100	-	-	-	-
	5.1. Teachers' and educational staffs' working environment	4	100	-	-	-	-
	5.2 Teachers' and educational staffs' engagement	4	100	-	-	-	-
6.	Operation	4	100	-	-	-	-
	6.1. Support and improvement process	4	100	-	-	-	-
	6.2. Operational effectiveness	4	100	-	-	-	-
7.	Results	4	100	-	-	-	-
	7.1. Students' learning results	4	100	-	-	-	-
	7.2. Students' and stakeholders' engagement results	4	100	-	-	-	-
	7.3. Teacher development and engagement results	4	100	-	-	-	-
	7.4. Leadership and governance results	4	100	-	-	-	-
	7.5. Budget and financial management results	4	100	-	-	-	-

The 2nd objective of the research is to develop the conceptual framework of excellent school management for enhancing students' creative self-efficacy. Based on suitability results collected from experts, the adjustment from advisor and co-advisor; then the conceptual framework of excellent school management for enhancing students' creative self-efficacy is finalized as detailed in Figure 1:

Management towards Excellence

1. Leadership
    1.1. Senior Leadership
    1.2. Governance and societal contribution
2. Strategy
    2.1. Strategy development
    2.2. Strategy implementation
3. Students and Stakeholders
    3.1. Students and stakeholders' expectation
    3.2 Students' and stakeholders' engagement
4. Measurement, analysis, and knowledge management
    4.1. Measurement, analysis, and improvement of school performance
    4.2. Information and knowledge management
5. Workforce (Teachers and educational staffs)
    5.1. Teachers and educational staffs working environment
    5.2. Teachers and educational staffs' engagement
6. Operation
    6.1. Support and improvement process
    6.2. Operational effectiveness
7. Results
    7.1. Students' learning results
    7.2. Students' and stakeholders' engagement results
    7.3. Teacher development and engagement results
    7.4. Leadership and governance result
    7.5. Budget and financial management result
        (Baldrige Performance Excellance Program, 2021)

Creative self-efficacy

1. Creative thinking self-efficacy
    1.1. Fluency self-efficacy
    1.2. Flexibility self-efficacy
    1.3. Elaboration self-efficacy
    1.4. Originality self-efficacy
2. Creative performance self-efficacy
    2.1. Field self-efficacy
    2.2. Personality self-efficacy
    2.3 Persistence self-efficacy
(Abbott, 2010; Daher et al. 2021; Du et al. 2020; Lin, and Wang, 2021; Liu et al. 2014; Shiu et al. 2012; Tan, and Majid, 2011; Yu, 2013b)

Excellence School Management for Enhancing Creative Self-Efficacy

Figure 1 Conceptual Framework of Excellence School Management for Enhancing Creative Self-Efficacy

    From figure 1, It reveals that:

The conceptual framework of creative self-efficacy consists of:

1. Creative thinking self-efficacy refers to an individual's belief in expressing creative thinking or solutions to the situation. Four factors indicate flexibility, fluency, elaboration, and originality self-efficacy.

        1.1. Fluency self-efficacy refers to the ability to generate a variety of reasonable ideas or solutions, reach various types of conclusions, have a good imagination, and consider a variety of responses to the problem or events that one encounters.

1.2. Flexibility self-efficacy refers to the ability to come up with various answers or responses, reply to a task in multiple ways, and think of various ideas while working on another work.

1.3. Elaboration self-efficacy refers to making a strange idea sound normal and logical by linking it with the knowledge one has learned and the ability to describe your dream to the other.

1.4. Originality self-efficacy refers to the ability to be the first to come up with a novel idea or solution, to think of fresh noteworthy ideas before others, and to come up with ideas that others haven't.

2. Creative performance self-efficacy refers to an individual's belief in expressing creative performance. Three factors indicate field self-efficacy, personality self-efficacy, and persistence self-efficacy.

2.1. Field self-efficacy refers to the ability to create a creative idea or product that others will choose and to persuade others that it is the most excellent fit.

2.2. Personality self-efficacy refers to the ability to drive yourself to come up with new ideas, enjoy unique views you learned from others, and keep thinking about things even after you've spent much time on them.

2.3. Persistence self-efficacy refers to the ability to retain a strong desire to acquire knowledge, teach oneself new things, monitor growth regularly, and persevere in challenges or negative feedback.

The conceptual framework of Excellence School Management consists of:

1. Leadership refers to senior leadership, governance, and school contribution to society.

1.1. Senior Leadership refers to how the school director leads the schools toward the set goal or vision and increases students' learning outcomes.

1.2. Governance and societal contribution refer to the way school director manages the school process repones to the good governance and societal contribution

2. Strategy refers to strategy development and implementation in the school.

2.1. Strategy development refers to how the school director leads to determine school strategies and development plans.

2.2. Strategy implementation refers to the ways the school director implements, develops, monitors, and evaluates the school strategies and plans toward the school vision.

3. Students and stakeholders refer to students and all stakeholder expectations and engagement.

      3.1. Students and stakeholder expectation refers to the ways school directors listen to students' and stakeholders' opinions and needs and develop the response school strategy and plan to meet students and stakeholders' needs.

      3.2. Students and stakeholder engagement refers to the ways school directors build a good relationship with students and stakeholders to get/attract their satisfaction and attention in school activities and management processes.

4. Measurement, Analysis, and Knowledge Management refer to the measurement and analysis of school performance; and the information, knowledge, and technology management in school.

      4.1. Measurement and analysis of school performance refer to techniques that school directors choose to measure and analyze school practice and achievement.

      4.2. Information, knowledge, and technology management refer to how school directors use the digital platform to manage and update the school's information, knowledge, and technology system.

5. Workforce (teachers and academic staff) refers to teachers and educational staff's working environment and engagement.

      5.1. Teachers' and educational staffs' working environment refers to the ways school directors use to develop the knowledge and ability of teachers and academic staff to respond to the need of the 21st century and industrial revolution 4.0.

      5.2. Teachers' and educational staff's engagement refers to the ways school directors motivate teachers and academic staff to involve in the school development and performance process.

6. Operation refers to support and improvement process, and operational effectiveness

      6.1. Support and improvement process refers to the ways school directors use to lead their day-to-day operation of work to respond to the school vision and mission

      6.2. Operational effectiveness refers to the ways school directors use to ensure effective management and a safe school environment for students.

7. Results refer to the school's performance and improvement in all parts. It focuses on students learning outcomes, student and stakeholder engagement results, teachers' and educational staff's development and engagement results, teacher and stakeholder communication results, and budget and financial results.

7.1. Students' learning results refer to the results of developing students' achievement each academic year.

7.2. Student and stakeholder engagement results refer to the results of students' and stakeholders' satisfaction and involvement in the teaching, learning, and school management process.

7.3. Teacher development and engagement results refer to the results of teachers and academic staff's collaboration and professional learning community in developing their teaching methodology, knowledge skill, and creativity.

7.4. Leadership and governance results refer to the results of the communication between the director and stakeholders and the community's support of school activities or management and development process.

7.5. Budget and financial management results refer to the results of effectiveness in mobilizing and allocating funds and resources and managing expenditure plans and records.

The new body of knowledge

Building students' self-efficacy in their creative thinking and leading the opportunities for students to show off their works are needed to fill in each other to empower students' creative self-efficacy to elicit creativity. The research finding revealed that creative self-efficacy could be promoted whenever creative thinking and performance self-efficacy are motivated. It cannot be successful unless excellent school management involves all elements (1-6) as leadership; strategy; students, and stakeholders; measurement, analysis, and knowledge management; workforce; and operation work together toward the only goal of developing students' creative self-efficacy. However, the 1-6 elements are just the process. To make the performance excellent, the school needs a regular evaluation of school performance results (1-5 results). The result evaluation presents outstanding and uncelebrated school performance in each part to encourage future development processes.

Discussion of research results

The research result of the 1st objective found that the framework of creative self-efficacy consists of creative thinking self-efficacy (fluency, flexibility, elaboration, and originality) and creative performance self-efficacy (field, personality, and persistence self-efficacy). It seems to reveal that efficacy of creative thinking is an intrinsic motivation to chase

the innovative efficacy product. To measure or increase the level of creative self-efficacy of the student, the two main dimensions and seven sub-dimension must take into account, as Hung (2018) measured the students' creative self-efficacy in Taiwan under the study on the dimensions: of creative thinking ability, creative performance, and against social persuasion Excellent school management is related to school leadership; approach; students and stakeholders; measurement, analysis, knowledge management; workforce; operation; and results. Successfully managing overall school performance needs the linkage of all components as a unified whole directed to the only set goal. It is consistent with the study of Faraj (2018), which demonstrated that excellent management must be considered in leadership, policies and strategies, human resources, and partnership and resources of the organization.

The research result of the 2nd objective found that the framework of excellent school management for enhancing creative self-efficacy is a mixture of the framework of excellent school management and creative self-efficacy. The conceptual framework highlighted that when a school plans to promote creative self-efficacy, the school must plan to develop all parts of excellent school management processes. It was consistence with Puente-Díaz (2016) demonstrated that organizational variables that include mission, expectation, and leadership behavior are used to improve individuals' creative self-efficacy.

Conclusion

The study demonstrates that creative thinking and performance self-efficacy are the two critical dimensions of creative self-efficacy. Each dimension contains its sub-elements that are necessary cells the school needs to work on to directly enhance students' creative self-efficacy. Leading a practical enhancing students' creative self-efficacy management excellence covering both processes and results must be considered to develop and evaluate.

Suggestions

1. The suggestion for using the finding of the research

1.1. School directors and the provincial office of education, youth, and sports should use the framework to prepare a plan to develop their school management and students' creative self-efficacy effectively.

1. 2. School directors should start evaluating their school performance and resources and make a continuous plan to develop each dimension.

2. The suggestion for the future research

Future research should involve the following issue:

1. There should be a study to measure each dimension of creative self-efficacy and excellent school management to see the position of students' creative self-efficacy and superior control and lead the development plan for developing the school and students.

2. There should be a study on developing guidelines or strategies of excellent school management that effectively enhance students' creative self-efficacy in the 21-century area.

References

Abbott, D. H. (2010). *Constructing a creative self-efficacy inventory: A mixed methods inquiry*. United States: ProQuest LLC.

Baldrige Performance Excellance Program. (2021). *2021-2022 Baldrige Excellence Framework (Education): Proven Leadership and Management Practice for Higher Performance* Gaithersburg, MD: U.S. Department of Commerce, National Institute of Standards and Technology.

Beghetto, R. A., & Karwowski, M. (2017). Toward untangling creative self-beliefs. In M. Karwowski & J. C. Kaufman (Eds.), *The creative self: Effect of beliefs, self-efficacy, mindset, and identity* (pp. 3–22). Elsevier Academic Press.

Beghetto, R., Kaufman, J., & Baxter, J. (2011). Answering the unexpected questions: Exploring the relationship between students' creative self-efficacy and teacher ratings of creativity. *Psychology of Aesthetics, Creativity, and the Arts*, 5(4), 342-349.

Bolden, B., DeLuca, C., Kukkonen, T., Roy, S., & Wearing, J. (2020). Assessment of Creativity in K-12 Education: A Scoping Review. *Review of Education*, 8(2), 343-376.

Brusoni, M., Damian, R., Sauri, J. G., Jackson, S., Kömürcügil, H., Malmedy, M., Matveeva, O., Motova, G., Pisarz, S., & Pol, P. (2014). *The concept of excellence in higher education*. EQNA. Retrieved February 24, 2022, from https://www.enqa.eu/publications/the-concept-of-excellence-in-higher-education/

Craft, A. (2010). *Creativity and Education Futures: Learning in a Digital Age*. ERIC.

Chong, E., & Ma, X. (2010). The influence of individual factors, supervision and work environment on creative self‑efficacy. *Creativity and Innovation Management, 19*(3), 233-247.

Daher, W., Gierdien, F., & Anabousy, A. (2021). Self-efficacy in creativity and curiosity as predicting creative emotions. *Journal of Research and Advances in Mathematics Education, 6*(2), 86-99.

Du, K. et al. (2020). Achievement goals and creativity: the mediating role of creative self-efficacy. *Educational Psychology*, 40(10), 1249-1269.

The EFQM. (2019). *The EFQM Model*. EFQM. Retrieved February 24, 2022, from https://mcusercontent.com/8aae4cc18759a21fc7689d67a/files/d5aa617d-fe86-48e9-a9f5-f3c817f0d14c/EFQM_MODELBROCHURE_AW_final_Free_Sponsors.01.pdf (EFQM)

Faraj, S. (2018). Assessing Excellence Management in the Light of the European Excellence Model at Taif University. *International Journal of Education and Literacy Studies*, 6(4), 175-186.

Farmer, S. M., & Tierney, P. (2017). Considering creative self-efficacy: Its current state and ideas for future inquiry. In M. Karwowski & J. C. Kaufman (Eds.), *The creative self: Effect of beliefs, self-efficacy, mindset, and identity* (pp. 23–47). Elsevier Academic Press.

Fitzgerald, M. (2021). *Why Creativity Is Just As Important As Literacy?.* Retrieved July 16,2021, from https://tinkergarten.com/blog/why-creativity-is-just-as-important-as-literacy

Fullan, M., & Langworthy, M. (2014). *A rich seam: How new pedagogies find deep learning*. Retrieved July 16, 2021, from https://michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich_Seam_web.pdf

Gallup. (2019). *Creativity in Learning*. Retrieved July 16, 2021, from https://www.gallup.com

Gong, Y., Kim, T., & Liu, Z. (2020). Diversity of social ties and creativity: Creative self-efficacy as mediator and tie strength as moderator. *Human Relations*, *73*(12), 1664-1688.

Huang, L., Krasikova, D., & Liu, D. (2016). I can do it, so can you: The role of leader creative self-efficacy in facilitating follower creativity. *Organizational Behavior and Human Decision Processes*, 132, 49-62.

Hung, S. (2018). Validating the creative self-efficacy student scale with a Taiwanese sample: An item response theory-based investigation. *Thinking Skills and Creativity*, 27, 190-203.

Karwowski, M. (2015a). Development of the creative self-concept. *Creativity: Theories Research-Applications*, 2(1), 125-140.

Karwowski, M. (2015b). Peer effect on students' creative self-concept. *The Journal of Creative Behavior*, 49(3), 211-225.

Karwowski, M., & Barbot, B. (2016). Self-beliefs and creativity in a developmental context. *Cambridge companion to creativity in reason and development*, 302-326.

Kaufman, J., & Sternberg, R. (2019). *The Cambridge Handbook of Creativity*. United Kingdom: Cambridge University Press.

Kelley, T., & Kelley, D. (2013). *Creative confidence: Unleashing the creative potential within us all*. Currency. The United States: Crown Business.

Lee, I., & Kemple, K. (2014). Preservice teachers' personality traits and engagement in creative activities as predictors of their support for children's creativity. *Creativity Research Journal*, 26(1), 82-94.

Lin, Y., & Wang, H. (2021). Using virtual reality to facilitate learners' creative self-efficacy and intrinsic motivation in an EFL classroom. *Education and Information Technologies*, 1-19.

Liu, C. et al. (2014). The effect of story grammar on creative self-efficacy and digital storytelling. *Journal of Computer Assisted Learning*, 30(5), 450-464.

Liu, X. et al. (2021). Perceived teacher support and creative self-efficacy: The mediating roles of autonomous motivation and achievement emotions in Chinese junior high school students. *Thinking Skills and Creativity*, 39, 100752.

Mathisen, G. (2011). Organizational antecedents of creative self-efficacy. *Creativity and Innovation Management*, 20(3), 185-195.

Mathisen, G. E., & Bronnick, K. S. (2009). Creative self-efficacy: An intervention study. *International Journal of Educational Research, 48*(1), 21-29.

Jobst, B., & Meinel, C. (2012). *How Can Creative Self-Efficacy by Fostered in Design Education?* Paper presented at the DS 74: Proceedings of the 14th International Conference on Engineering & Product Design Education (E&PDE12) Design Education for Future Wellbeing, Antwerp, Belguim, 06-07.9. 2012.

Nascimento, G. (2017). *Health and Self Empowerment*. Retrieved August 25, 2021, from https://anewkindofhuman.com/creative-genius-divergent-thinking-test/

Nemeržitski, S., & Heinla, E. (2020). Teachers' Creative Self-Efficacy, Self-Esteem, and Creative Teaching in Estonia: a Framework for Understanding Teach-ers' Creativity-Supportive Behaviour. *Creativity. Theories – Research - Applications, 7*(1), 183-207.

Ng, P., & Chan, D. (2008). A comparative study of Singapore's school excellence model with Hong Kong's school-based management. *International Journal of Educational Management*, 22(6), 488-505.

Park, N., Jang, W., Thomas, E., & Smith, J. (2021). How to organize creative and innovative teams: creative self-efficacy and innovative team performance. *Creativity Research Journal*, 33(2), 168-179.

Pretz, J., & Nelson, D. (2017). Creativity is influenced by domain, creative self-efficacy, mindset, self-efficacy, and self-esteem. In *The creative self* (pp. 155-170). Elsevier.

Puente-Díaz, R. (2016). Creative self-efficacy: An exploration of its antecedents, consequences, and applied implications. *The Journal of psychology, 150*(2), 175-195.

Puozzo, C. I. & Audrin, C. (2021). Improving self-efficacy and creative self-efficacy to foster creativity and learning in schools. *Thinking Skills and Creativity,* 42(2), 1-9.

Rabbani, S., Sarmad, D., Khattak, A., & Khan, M. (2020). *Creative Self-Efficacy and Product Innovation: Uncovering the Role of Creativity and Entrepreneurial Passion. 13*, 2020.

Rajitanon, P. (2019). Approaches for Developing Management Toward Excellence of Academic Educational Khanom School Network in Nakhon Si Thammarat Province Based on the Concept of Student Entrepreneurship. *Educational Management and Innovation Journal,* 3(3), 20-39.

Sangsuk, P., & Siriparp, T. (2015). Confirmatory factor analysis of a scale measuring creative self-efficacy of undergraduate students. *Procedia-Social and behavioral sciences*, 171, 1340-1344.

Shiu, S., Lin, S., & Chien, H. (2012). The relationship between learning motivation and innovative behavior in the university students: From the perspective of creative self-efficacy. *International Journal of Arts & Sciences*, 5(5), 33-38.

Smith, J. (2019). *Creative Self-Efficacy: Students in General Education, with Learning Disabilities, and with Gifts and Talents.* United States: ProQuest LLC.

Rip, S. (2019). *A performance-based study of the effects of schooling on students' creativity and creative self-efficacy*. ProQuest LLC: University of Lethbridge (Canada).

Tan, A. (2012). *Creativity, talent, and excellence*. Singapore: Springer.

Tan, A., & Majid, D. (2011). Teachers' perceptions of creativity and happiness: A perspective from Singapore. *Procedia-Social and behavioral sciences, 15*, 173-180.

Tang, M., Hu, W., & Zhang, H. (2017). Chapter 13 - Creative Self-Efficacy From the Chinese Perspective: Review of Studies in Mainland China, Hong Kong, Taiwan, and Singapore.

In Karwowski, M., & Kaufman, J. C. (Eds.), *The Creative Self* (pp. 237-257). Academic Press.

Tep, P., Maneewan, S., Chuathong, S., & Easter, M. (2021). The relationship between human values and creative ideation among undergraduate students: The role of creative self-efficacy. *Cogent Psychology*, 8(1), 1885575.

Tierney, P., & Farmer, S. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal*, 45(6), 1137-1148.

World Economic Forum. (2018). The Future of Jobs Report. Retrieved July 25, 2021, from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

Yu, C. (2013). An empirical examination of a four-component of creative self-efficacy among undergraduate students. *Journal of Applied Sciences*, 13(19), 4092-4095.

Yu, C. (2013). The relationship between undergraduate students' creative self-efficacy, creative ability, and career self-management. *International Journal of Academic Research in Progressive Education and Development*, 2(2), 181-193.