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Research Article

A Faculty Development Framework for Senior High School Teachers Based on Creativity, Skills, and Motivation

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ABSTRACT

This study examined the relationship among domain-relevant skills, creative thinking, and task motivation among Senior High School (SHS) teachers using a convergent parallel mixed-methods design. Quantitative data were gathered using the Philippine Professional Standards for Teachers (PPST), Torrance Tests of Creative Thinking (TTCT), and Work Preference Inventory (WPI), while qualitative insights were obtained from focus group discussions and classroom observations. Overall, teachers demonstrated high levels of domain-relevant skills and average levels of creative thinking skills, with relatively stronger performance observed in originality and fluency. In terms of motivation, teachers reported slightly higher levels of intrinsic motivation, particularly enjoyment, compared to challenge, while extrinsic motivation remained average, with compensation rated higher than external recognition. Correlation analysis did not reveal statistically significant relationships among the variables. However, qualitative findings highlighted the influence of both individual and contextual factors. Teachers emphasized intrinsic motivation, instructional practices, and institutional support as contributing to creativity, while also identifying constraints such as limited resources, heavy workloads, and limited professional development opportunities. These findings suggest that teacher creativity appears to be influenced by a combination of personal and environmental conditions rather than strong statistically significant relationships among the measured variables. Based on these findings, a faculty development framework is proposed to support teacher creativity through targeted professional development, improved institutional support, and resource provision, with the goal of fostering more innovative teaching practices.

Keywords: *Creative-thinking skills, Domain-relevant skills, Extrinsic motivation, Intrinsic motivation, Teacher creativity*

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Introduction

It's getting clearer that creativity in education is increasingly viewed as a key element in developing the innovative problem-solving skills needed by learners for success in the 21st century (OECD, 2020; Keenan-Lechel et al., 2023). Teachers are the primary agents of instructional delivery and therefore have an important role in creating learning environments conducive to creativity, critical thinking and student engagement (Anderson et al., 2022; Henriksen et al., 2021). Understanding the different influences on a teacher's creativity will be essential to improving the quality of teaching to enhance the outcomes of all students.

Amabile's Componential Theory of Creativity has been influential in shaping research around creativity. This model includes three main components: domain-specific abilities (such as knowledge and skills within a given field), creative thinking skills (fluency, originality, elaboration, abstractness of titles, and resistance to premature closure), and motivation (primarily intrinsic). It is thought that all three of these components interactively create output when considered as a whole. Numerous empirical studies done on this model have provided empirical evidence supporting it in education settings (and in particular for teachers) by supporting that intrinsic motivation and the environment are highly important to a teacher's capacity to create.

The Philippine education system has undergone many recent reforms aimed at aligning the national curriculum with 21st-century learning competencies; thus, there has been a clear increase in the demand by teachers for creative teaching strategies (DepEd, 2020). However, teachers face many systemic barriers (e.g., rigidly defined curricular frameworks; limited opportunities for professional development) in their ability to implement these creative teaching strategies, particularly in public school systems (e.g., Andal & Hermosa, 2024; Cabunoc & Ubayubay, 2024), limiting their ability to fully utilize creative instructional practices that promote critical thinking skills and student engagement. As a result, support for educators to solve the barriers that prevent them from providing innovative, high-quality

education aligned to local and global education reform strategies is essential.

Although research on teachers' creativity is expanding globally, there is still little empirical research that explores the nature of the relationships among domain-relevant skills, creative thinking skills, and task motivation in the Philippines' senior high school (SHS) context. Thus, localized research is needed to find out how these three areas relate to one another, and what effect they have on the implementation of creative teaching processes in the SHS context.

This study looked at senior high school (SHS) teachers' levels of the types of skills, abilities, and extrinsic and intrinsic motivation they need to be creative in the classroom. It also explored the relationship between these three areas or domains and how they relate to teacher creativity and professional development as well as educational policy.

The article reviewed the available literature regarding the variables of domain-related skill, creative thinking skills, and motivation to complete a task among SHS teachers. The relationship between these three factors, how they impact the teacher's ability to teach effectively, and how this relates to faculty development were analyzed.

Creativity has always been regarded as an essential component of good teaching and student engagement. More recent research has also shown the continuing influence of divergent thinking - defined as fluency, flexibility, originality, and elaboration - as one of the main components that characterize creative achievements (Runco & Acar, 2020). All four of these played a role in the development of more modern measures of creativity used in social and educational contexts (i.e., contemporary creativity assessment tools). Current work using the Componential Theory of Creativity continues to support the concepts of domain-specific knowledge, creativity-related thinking skills/abilities, and intrinsic motivation as necessary contributors to innovative teaching (Anderson et al., 2021). Each of these newest versions of the Componential Theory of Creativity have established an up-to-date foundation of knowledge from which to develop effective

practices for fostering creativity within schools and colleges.

Many studies show how creative teachers can make a difference in the quality of students' education. Teachers who are creative use their creativity as one way to create exciting and effective student-centred learning experiences (Bhardwaj et al., 2025). Therefore, research shows that when teachers use creativity in their teaching, they can create an environment where students are participating at higher levels, curious about everything they are learning, and achieving the highest academic capacity (Pont-Niclòs et al., 2024).

While integrating creative teaching methods has many advantages, many teachers experience barriers to doing so because of systemic issues. Teaching requires all educators to have domain-specific competence and pedagogical understanding in order to achieve proficient levels of instruction. Research indicates that teachers with a greater depth of knowledge regarding their subject material as well as how students learn the material (known as pedagogical content knowledge) perform better in general; however, the improvement in teacher performance is even greater when working with students enrolled in STEM courses (Mafa-Theledi, 2022). In addition, it has been found that by participating in professional development programs, teachers' subject matter expertise improves and allows for the effective application of teaching methodologies resulting in improved student learning outcomes (Nilsson & Karlsson, 2022). In addition, the Philippine Professional Standards for Teachers (PPST) provide a comprehensive set of professional standards designed to guarantee that educators are capable to deliver high quality and effective instruction (Department of Education [DepEd], 2017).

Teachers' motivation, both intrinsic (internal) and extrinsic (external), is critical in determining how teachers perform and how engaged they are in their work. Researchers continue to show that motivation has an important influence on overall educator productivity and commitment. For example, according to Baluarte et al. (2023), intrinsic and extrinsic motivation have a strong positive relationship with employee productivity; therefore, workers

who are motivated will likely produce more than those who are not. Also, Pagulong (2024) studied the level of teacher motivation within the Babak District, Island Garden City of Samal, and found that intrinsic variables received the highest mean score overall, indicating that teachers feel a lot of personal satisfaction and motivation from within due to the intrinsic value of the job as perceived by them. Finally, Inoncillo (2024) argued that anxiety is a predictor of achievement and that some level of anxiety might enhance concentration, effort, and engagement with the task at hand; however, too much anxiety can limit creativity and performance on the task at hand. The low pay and excessive workloads faced by many teachers at this time are major contributing factors to their loss of intrinsic motivation as evidenced in the 2020 SEAMEO INNOTECH report which highlights the need for supportive policies which will lead to an increase in teacher motivation and well-being.

Effective teaching must rely on creative ideas that shape instructional strategies and foster student interest. Creativity can be defined in many ways; some examples include: cognitive flexibility, problem solving, and intrinsic motivation. Several studies have been conducted researching the effects of all three of these types of creativity on the way high school education is delivered to students. For example, Wang & Chang (2022) found evidence that cognitive flexibility has a mediating effect on both intrinsic motivation and creativity among junior high students. This leads to the conclusion that fostering cognitive flexibility will help increase the level of creativity. Honra & Monterola (2024) conducted similar work with biology instruction using Design Based Approach (DBA) as a means to improve student cognitive flexibility, indicating that DBA provided students with opportunities to make connections between what they learn in a theoretical sense and what they will do in a practical sense. Although there are many ways educators can encourage creativity, there are also many ways their creativity may be limited by curriculum constraints or pressure from the system. Understanding the various ways educator's different domains of creativity are connected to one another will provide valuable input for the

development of learning environments that foster creativity, which may contribute to their improved learning opportunities.

Additionally, even though there has been a rise in awareness regarding how teachers' creativity affects students' performance, there has not been a large number of quantitative studies measuring how domain-relevant skills, creative thinking, and motivation come together for Senior High School teachers in the Philippines.

Most of the current literature is based on either all and/or only the Western world or only general educational levels. Whatever the case may be, there is still a huge gap in the literature available about how if these domains of creativity work together at the Senior High School level in a specific country (Philippines). Understanding how these domains work together will help us create targeted interventions and professional development programs that will help foster more creative teaching throughout the entire Philippine education system.

In addition, this study will look at how teachers' domain knowledge and skills interact with their ability to think creatively as well as their intrinsic and extrinsic motivation toward the tasks assigned to them so as to assess their total creative potential. By identifying present levels of these three variables and measuring the degree and nature of their relationship to each other, this research seeks to examine the extent to which teaching performance is influenced by these three variables as a group. Ultimately, the purpose of this study is to contribute to the creation of a structured framework to develop each of these specific competencies and create a path for continued professional growth designed to support a more creative and innovative educational environment.

Methodology

Study Design

The research design employed in this study is convergent parallel mixed method design, which included the collection of quantitative and qualitative data to assess the creative capacity of Senior High School teachers. In contrast to sequential designs that employ one phase to inform or build on another phase, this method enables simultaneous collection of quantitative and qualitative data (i.e., test

scores and educators' lived experiences and systemic realities) to provide a more complete overview of teacher creativity through triangulation. (Creswell & Plano Clark, 2018).

Participants and Data Sources

The research consisted of 44 SHS (Senior High School) teachers. The teachers came from one (1) Senior High School in Bulacan and we attempted to have representation amongst a variety of disciplines and with varying years of experience within the classroom. Every teacher that participated in this research project was working at the institution at the time of the inquiry. As part of the inclusion criteria in selecting the participants, all teachers had to currently be teaching in the classroom and have at least one year (1) of experience in teaching within their respective subjects.

Through purposive sampling, 44 teachers at an institution were chosen as participants in the study. Although $N = 44$ is relatively a small sample size for traditional inferential statistics, it provides strong contextual relevance for the specific institutional setting. In line with the convergent-parallel mixed-methods design, qualitative data from the 44 participants in five focus group discussions provided rich contextual insights that helped explain and support the interpretation of the quantitative findings despite the study's limited sample size. The goal of this research is not simply to conduct a broad survey, but to conduct an in-depth examination of the teachers' creativity in the context of the participating institution.

Instruments

Three adopted standardized instruments were employed in this study. The Torrance Tests of Creative Thinking (TTCT), developed by Torrance (1974), assessed creative-thinking skills, including fluency, originality, elaboration, abstractness of titles, and resistance to premature closure. The Work Preference Inventory (WPI), developed by Amabile et al. (1994), evaluated intrinsic and extrinsic task motivation. The Philippine Professional Standards for Teachers (PPST), issued by the Department of Education (DepEd, 2017), served as a framework for assessing domain-relevant teaching competencies. The domains include

Content Knowledge, Learning Environment, Curriculum and Planning, and Assessment and Reporting. Additionally, a researcher-developed Focus Group Discussion (FGD) protocol, reviewed and validated by five content experts, was used to guide qualitative data collection and ensure alignment with the study's objectives.

Procedure

This study used three standardized instruments that were widely recognized as valid and reliable for their specific purposes: Torrance Tests of Creative Thinking (TTCT) developed by Torrance (1974), Work Preference Inventory developed by Amabile et al. (1994), and Philippine Professional Standards for Teacher (PPST). Participants from the study completed the three adopted standardized instruments, TTCT, WPI, and PPST, in two phases: Phase I (qualitative) and Phase II (quantitative).

All of the TTCT tasks were given face-to-face by having everyone in a group of individuals who completed the TTCT in the same location and at the same time. A qualified psychological technician (psychometrician) gave all the participants very specific and complete instructions on how to take the TTCT so that all of them understood what they needed to do to complete the tasks. The psychometrician also went through each part of the TTCT procedure step by step and made sure that all the participants were very clear about what the task required them to do and that they were comfortable completing the tasks. By administering the TTCT in a controlled setting, the psychometrician was able to ensure that all of the participants could concentrate and provide unimpeded responses to the TTCT items. Conducting the TTCT in this manner helped to provide data that was consistent and therefore provided for reliable evaluations of the participants' creative skills (e.g., fluency, originality, elaboration, abstractness of titles, and resistance to premature closure).

The researcher created an online version of the WPI to collect data from participants. Participants had 15-20 minutes to complete the WPI that analyzed intrinsic/extrinsic task motivation with an online version of the WPI formed through Google Forms. The researcher

was present to help participants with technical issues and questions so they could successfully complete the online version of the WPI.

The Philippine Professional Standards for Teachers (PPST), developed by the Department of Education (DepEd, 2017), was utilized to evaluate teacher competency in specific domains. Content knowledge, learning environment, curriculum and planning, and assessment and reporting were among those domains. Furthermore, the researcher-designed FGD protocol was reviewed and approved by five subject matter experts and used as a guide for collecting qualitative data in order to meet the purposes of the study.

The PPST assessment was conducted through classroom observations, where the researcher, along with a peer rater, observed the teachers during their regular teaching sessions. The peer rater was involved in the observation process to ensure the assessment's accuracy and reliability and to minimize potential bias in evaluating the teachers' performance. Interrater reliability for the Philippine Professional Standards for Teachers (PPST) classroom observation ratings was assessed using Cohen's kappa, indicating very high consistency in agreement among raters, $\kappa = .82$, $p < .001$. The observations were conducted throughout the duration of the class session. The observers remained discreetly positioned at the back of the classroom to avoid disrupting the class. They used the PPST Observation Rubric to monitor and assess the teachers' performance, with scores recorded directly on the rubric.

Focus Group Discussion

In the qualitative aspect of the research, FGDs and classroom observations were used to gather information about the perspectives of the participants regarding motivation to complete tasks and creativity. The FGD guide was designed using Amabile's (1983) Componential Theory, thereby providing a close correspondence between (a) the qualitative inquiry and (b) the quantitative variables. From classroom observations, information was obtained about creative engagement strategies employed during instruction and comprehensive notes were made to supplement the data gathered from the other instruments. A validated protocol was

used to guide the five FGDs, which involved a total of 44 teacher-participants distributed across groups of eight to nine members each. The discussions aimed to gather information on facilitating creativity through open-ended questioning and promoting meaningful discussions. Each FGD was conducted in-person and lasted from 40 to 50 minutes. In addition to providing qualitative data on the teachers' views of motivation and creativity and the limitations on developing creative teaching methods through quantitative means, the FGDs provide valuable information about barriers and possibilities for establishing creative teaching.

Method of Data Analysis

An analysis of creativity among SHS teaching staff used PPST, WPI, and TTCT quantitative data and conducted descriptive statistics of means and standard deviation for all instruments. For PPST, each participant's score was determined using a five-point Likert scale rating per instrument to obtain an average score and categorize rating levels (Very Low; Low; Average; High; Very High).

The WPI's results revealed participants' intrinsic or extrinsic motivation through an overall calculated mean score for each. Reverse scoring was used when appropriate to determine overall mean score results. The TTCT provided a creativity index score to measure each participant's fluency, originality, elaboration, abstractness of titles and resistance to premature closure. The TTCT's overall results for each participant were interpreted through established categories of Very Weak to Very Strong.

Pearson's correlation coefficient was used to evaluate the relationships between the variables. This statistical method measures the strength and direction of relationships between relevant skills in each domain, motivation to complete a task and creativity. Analysis was completed using the SPSS statistical software package, and a significance level of $p < 0.05$ was considered statistically significant.

The focus groups were transcribed and analyzed following Braun and Clarke (2006)'s thematic analysis methodology to identify key themes to provide a deeper understanding of

the factors that influence creativity and motivation found within the quantitative study.

Ethical Considerations

This study was reviewed and approved by the Committee on Ethics Review of Baliwag Polytechnic College, with endorsement from the Institute of Arts and Sciences. As the institution does not have a formal Institutional Review Board (IRB), the committee and designated faculty reviewers served as the official body responsible for evaluating research involving human participants. Ethical clearance was obtained prior to data collection (Reference No.: CER-2026-001). All participants provided informed consent prior to participation. Confidentiality and anonymity were strictly maintained, and participation was entirely voluntary throughout the study.

Results and Discussions

The first part of this study presents a quantitative assessment of SHS teachers' domain-specific skills, creativity, and motivation, as measured using the Torrance Tests of Creative Thinking (TTCT) and the Work Preference Inventory (WPI).

Table 1 presents the results on domain-relevant skills of SHS teachers using the PPST-based Classroom Observation Tool, summarized through means and standard deviations across assessment areas.

The findings indicate that Senior High School teachers demonstrated high levels of domain-relevant skills across PPST domains. The mean score of 3.74 in Content Knowledge suggests a high level of proficiency in planning and delivering instruction. Teachers showed a strong understanding of lesson structure and the use of varied teaching strategies. The Learning Environment domain ($M = 4.05$), results indicate generally high performance; however, observations suggest some variability in the consistent use of advanced strategies, particularly in integrating ICT to address diverse learning needs. Although teachers were generally aware of ICT resources, their ability to apply these effectively in the classroom appeared to be limited by constraints such as insufficient resources and lack of training. In the Curriculum and Planning domain ($M = 3.85$),

teachers demonstrated alignment with curriculum standards. Similarly, performance in Assessment and Reporting ($M = 4.04$) was high although teachers showed limited experience in utilizing digital assessment tools that could improve efficiency in classroom assessment practices.

These findings highlight the need for targeted professional development programs that support teachers in integrating ICT into their instructional practices, particularly through hands-on training and improved access to resources.

Table 1. Level of Domain-Relevant Skills of the SHS Teachers

Variables	M1	SD1	M2	SD2	TOTAL M (M1 & M2)	TOTAL SD (SD1 & SD2)
Content Knowledge	3.75	1.05	3.73	0.55	3.74	0.84
Learning Environment	4.28	0.57	3.81	0.33	4.05	0.47
Curriculum & Planning	4.02	1.06	3.67	0.22	3.85	0.77
Assessment & Reporting	4.22	0.40	3.86	0.50	4.04	0.45
Overall Domain-Relevant Skills	4.07	0.31	3.77	0.23	3.92	0.27

Note: $N = 44$ Scoring Interpretation= 1.00-1.80 = Very Low; | 1.81-2.60 = Low; | 2.61-3.40 = Average; | 3.41-4.20 = High; | 4.21-5.00 = Very High

Table 2 presents the level of creative thinking skills of SHS teachers as measured by the TTCT across various subscales. It highlights the strengths and weaknesses in different aspects of their creative thinking skills.

The findings indicate that participants demonstrated varying levels of performance across the TTCT subscales. The fluency subscale obtained a mean score of 112.52 ($SD = 21.14$), which indicates an average ability to generate multiple ideas. The originality subscale yielded a mean score of 137.34 ($SD = 21.89$), interpreted as strong, which suggests high ability to produce unique and original ideas.

The elaboration subscale recorded a mean score of 81.41 ($SD = 18.21$), indicating an average ability to expand and develop ideas further. Likewise, the abstractness of titles subscale

obtained a mean score of 84.55 ($SD = 30.27$), which also falls within the average range, reflecting an average ability to think abstractly when creating titles.

In contrast, resistance to premature closure obtained a mean score of 67.14 ($SD = 22.12$), interpreted as weak, indicating difficulty in maintaining openness to alternative ideas and solutions while working on a problem. The overall creativity index score was 96.54 ($SD = 22.73$), falls within the average range.

To sum up, the findings indicate a particular strength in originality, while opportunities for improvement were more evident in resistance to premature closure and, to a lesser extent, elaboration and abstractness of titles. These findings highlight areas where professional development activities may help strengthen teachers' creative-thinking capabilities.

Table 2. Creative Thinking Skills of the SHS Teachers

	<i>M</i>	<i>SD</i>
Fluency	112.52	21.14
Originality	137.34	21.89
Elaboration	81.41	18.21
Abstractness of Titles	84.55	30.27
Resistance to Premature Closure	67.14	22.12
<i>Creativity Index</i>	96.54	22.73

Note: $N = 44$. Scoring Interpretation: $\geq 149 =$ Very Strong; 121-139 = Strong; 80-120 = Average; 61-79 = Weak; $< 60 =$ Very Weak.

Table 3 presents the internal motivation levels of SHS teachers, measured using the WPI tool, showing the mean (M) and standard deviation (SD) for the enjoyment and challenge subscales, along with the overall internal motivation score.

The analysis of the WPI responses revealed that SHS teachers demonstrated an average level of internal motivation overall. The enjoyment subscale obtained an average score of 3.35 (SD = 0.64), indicating that teachers

generally experience personal satisfaction and enjoyment in their work. In contrast, the challenge subscale recorded a lower mean score of 2.30 (SD = 0.90), suggesting that teachers were less motivated by tasks involving challenge, complexity, or professional risk-taking. Overall, the findings suggest that internal motivation among SHS teachers is more strongly associated with enjoyment and personal fulfillment than with challenge-oriented motivation.

Table 3. Internal Motivation of the SHS Teachers

	M	SD
Enjoyment	3.35	0.64
Challenge	2.30	0.90
Internal Motivation Average	2.95	0.77

Note: N = 44 Scoring Interpretation: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Average; 1.81-2.60 = Low; 1.00-1.80 = Very Low.

Table 4 presents the level of external motivation among SHS teachers, measured using the WPI tool. It shows the mean (M) and standard deviation (SD) for the outward and compensation subscales, along with the average external motivation score.

The mean score for outward motivation (2.60; SD = 0.96) falls at the lower boundary of the 'Low' category, while compensation (2.68; SD = 0.90) falls within the 'Average' range. The external motivation (M = 2.64; SD = 0.93) is

classified as 'Average.' These findings indicate that external motivational factors are present among SHS teachers, although they appear to be less pronounced compared to intrinsic forms of motivation. Among the external factors measured, compensation showed slightly higher motivational influence than outward recognition. The findings also highlight the possible role of institutional support and recognition in influencing teachers' external motivation.

Table 4. Level of External Motivation of SHS Teachers

Subscale	Mean (M)	SD
Outward	2.60	0.96
Compensation	2.68	0.90
External Motivation Average	2.64	0.93

Note: N = 44 Scoring Interpretation: 4.21-5.00 = Very High; 3.41-4.20 = High; 2.61-3.40 = Average; 1.81-2.60 = Low; 1.00-1.80 = Very Low.

Table 5 presents the correlation results examining the relationships among domain-relevant skills, creative thinking skills, and intrinsic and extrinsic task motivation. All computed correlations were weak and statistically non-significant ($p > .05$).

The level of relationship between skills associated with a given domain and creative thinking was extremely weak ($r = -.006$), suggesting that no evident linear relationship was

observed within the sample. Moreover, domain-specific skills showed a weak negative correlation with intrinsic motivation ($r = -.078$) and a weak positive correlation with extrinsic motivation ($r = .056$). Creative thinking abilities also showed a weak negative correlation with intrinsic motivation ($r = -.060$) and a weak positive correlation with extrinsic motivation ($r = .084$). Given the weak and non-significant correlations, the findings may suggest that the

relationships among these variables were minimal within the context of the present study.

Nevertheless, these findings should be interpreted with caution. The relatively small sample size (N = 44) and the use of participants from a single institution may have limited the statistical power of the analysis to detect small to moderate relationships. A post-hoc power analysis conducted using G*Power indicated that with a sample size of 44, the study achieved approximately 46% power to detect a

medium effect size ($r = .30$) at $\alpha = .05$, suggesting limited sensitivity and an increased risk of Type II error. Therefore, the absence of statistically significant correlations does not necessarily indicate the absence of true relationships among domain-relevant skills, creative thinking skills, and task motivation. Further research with larger and more diverse samples is recommended to provide a more robust examination of these relationships.

Table 5. Relationships Among Variables

Constructs	1	2	3	4
Domain Relevant Skills	-			
Creative Thinking	-.006	-		
Intrinsic Task Motivation	-.078	-.060	-	
Extrinsic Task Motivation	.056	.084	.096	-

Note. N = 44, p > .05.

Qualitative Findings

Table 6 presents the themes generated from the Focus Group Discussions (FGDs) conducted with Senior High School (SHS) teachers. To determine what influences the teachers' creative thinking and teaching styles, Focus Group Discussions (FGD) were utilized to obtain people from various schools to provide opinions via interviews on certain questions. The five (5) major themes with corresponding subthemes identified from the FGDs are: (1) the

creation of creative projects (or ideas) as a result of their teaching; (2) perceptions of expertise in the subject matter as it relates to teaching; (3) factors that contribute to enhancing creativity; (4) factors that inhibit creativity; and (5) what the School can do in order to help them develop creatively. Each of the central themes includes sub-themes that clearly show how complex and difficult it is for the SHS teachers to foster creativity within their lessons.

Table 6. Themes Generated from the Interview Data

Interview Protocol	Theme	Subtheme
Topic 1: Creative Project/ Idea SHS Teachers Generated in Their Work	<ul style="list-style-type: none"> Efficient and effective pedagogy Inspiring students 	Foster enjoyment, Deliver results
Topic 2: Perception of Their Teaching Expertise on the Subject Matter	<ul style="list-style-type: none"> Perceived average level of proficiency 	Lack of confidence Limited experience Lack of professional development
	<ul style="list-style-type: none"> High level of proficiency 	Subject mastery Previous experience
	<ul style="list-style-type: none"> Exceptional level of proficiency 	Strong subject mastery Extensive experience Self-motivation and passion
Topic 3: Factors That Help Bring Out Their Creativity as a Teacher	<ul style="list-style-type: none"> Satisfaction from students Purpose in life/Calling 	Positive feedback Seeing progress Shared success Limited facilities and

Interview Protocol	Theme	Subtheme
	<ul style="list-style-type: none"> • Necessity for innovation • Passion • Salary 	resources Intrinsic Motivation Job satisfaction Competitive Salary
Topic 4: Factors That Hinder Their Creativity as a Teacher	<ul style="list-style-type: none"> • Lack of facilities • Workload • Personal problems • Lack of seminars • Uninterested students • Lack of experience 	Insufficient budget Bureaucratic hurdles Multiple subject teaching Health issues Family responsibilities Negative class atmosphere Inadequate training
Topic 5: What the School Can Do to Support Their Creative Development	<ul style="list-style-type: none"> • Provision of facilities • Seminars • Administrative support • Advanced education • Rest and recreation • Salary 	Enhances teaching creativity Ongoing professional learning Provides new ideas Encourages creative mindset Expanding knowledge Reduces burnout Increases job satisfaction

Note: Themes were identified based on recurring patterns and participants' significant statements. Subthemes represent specific aspects of each central theme.

The qualitative phase (FGDs and classroom observations), provided considerable insights into the possible influences on creativity and motivation for SHS teachers. Four hundred and fifty-one codes across the various themes were generated using thematic coding (Quirkos).

Intrinsic motivation emerged as a prominent theme, particularly in relation to passion (n = 13) and satisfaction (n = 10). Teachers emphasized that personal commitment and fulfillment in teaching drive their creativity. As one participant stated, *"Teaching is my calling... it pushes me to go beyond traditional methods."* This highlights the strong internal drive that supports innovative teaching practices.

External and environmental factors were also strongly represented in the data. Themes related to environment (n = 24), resources (n = 24), and workload (n = 14) were among the most frequently coded. Teachers reported that these constraints significantly affect their ability to be creative. As one participant noted, *"The environment... is not conducive for teaching and learning."* This suggests that physical and contextual limitations appear to influence creative instructional delivery.

Instructional practices and strategies were also highlighted, with methods (n = 28) and activities (n = 20) reflecting teachers' efforts to

adapt their teaching approaches. Teachers emphasized the importance of engaging students through varied techniques. One participant explained that creativity involves *"doing something different... to catch students' attention."*

Another common theme was the support from institutions; this included providing (n=20) and holding seminars or training (n=13). Teachers indicated a desire for ongoing professional development and administrative support. One participant said: "We need more workshops and seminars to enhance our teaching methods."

The qualitative data indicated that average levels of intrinsic motivation was demonstrated by teachers; however, enjoyment and passion for teaching came out strongly in the FGDs. Teachers were also found to utilize various instructional strategies; however, their creative potential appeared to be influenced by environmental constraints and the level of institutional support provided.

The qualitative findings complement and contextualize the quantitative results. Although teachers demonstrated domain-relevant capabilities, the nature of the student learning environment and the presence of external barriers to creativity, such as limited resources and in-

adequate professional development opportunities, appeared to function as influential contextual factors affecting teachers' motivation to engage in creative teaching practices.

Relationships Within Domains

According to Amabile (1996), domain relevant skills are the knowledge, competencies and technical skills that teachers require in order to successfully deliver their subject. The results of the study indicated that teachers from Senior High Schools (SHS) possess a range of domain-relevant skills; specifically, some indicated that they consider themselves average, others highly, and a few exceptionally skilled in their subject areas. There are a number of reasons for this variation in self-assessment, such as years of experience, familiarity with the content, and the availability of opportunities for professional development. In general, those with a greater level of experience or who have participated in regular professional development may be more likely to rate themselves higher on their domain-relevant skills than those with little or no experience or those who have not participated in structured opportunities for professional development.

In the Philippine context, where resources for professional development can sometimes be limited (DepEd, 2017), teachers' access to formal and informal learning opportunities significantly influences their proficiency in domain-relevant skills.

The framework for enhancing skills identified in PPST is the Philippine Professional Standards for Teachers (PPST); however, due to inconsistencies in access to training, such as rural or under-privileged areas, the effect of PPST on domain-related skills of SHS educators will vary (DepEd, 2017). To put it differently, who SHS teachers are in terms of domain-based tools and training as a function of their background (experience) and the level of support provided (institutional) they receive to help create a fair teaching environment.

Creative Thinking Skills

Creative thinking, as measured by the Torrance Tests of Creative Thinking (TTCT), involves fluency, originality, elaboration, resistance to premature closure, and

abstractness of titles (Torrance, 1979). The study found that teachers' creative thinking abilities were **generally average overall, with relatively stronger performance in** originality and fluency, but less strong in resistance to premature closure and abstractness of titles.

As a result of working within strict curriculum frameworks, Senior High School teachers often fall back on predictable and repetitive teaching approaches, rather than encouraging innovative methods. Many teachers have to follow standardized curriculum guides, and their use of new techniques is additionally restricted by time and resources.

Teachers who have a passion for the subject they teach and are motivated by their purpose to teach and engage students may have a greater level of creative thinking skills (specifically fluency and elaboration). Researchers concluded that intrinsic factors, such as job satisfaction and a sense of fulfillment when students succeed, contribute to creativity. On the other hand, extrinsic factors (salary and institutional support) appeared less directly related with creative-thinking skills in the present findings. Although these factors may influence teachers' motivation and teaching experiences, they did not appear to have a strong direct relationship with creative-thinking skills within the context of the study.

The absence of a significant correlation between Creativity and the domain-related skill set may imply that although educators bear the requisite competencies as well as knowledge base related to their subject areas, they frequently do not transfer this into creative thinking in their class-rooms, due to external limitations or lack of support to foster innovation. In addition, the institutional and cultural mandates for traditional, standardized forms of pedagogy may inhibit creativity to the extent such that educators find it difficult to move outside of established teaching norms.

Task Motivation (Intrinsic and Extrinsic)

There are two types of motivation for teachers, intrinsic and extrinsic motivation; intrinsic motivation appeared to play a more prominent role in teachers' perceptions of creativity than extrinsic motivational factors. Teachers derive their intrinsic motivation from their love for

teaching and enjoyment derived from it, while many teachers find extrinsic motivation through outside rewards. Intrinsically, teachers receive satisfaction from the challenge of overcoming obstacles in their profession.

Teachers who reported higher levels of intrinsic motivation also tended to describe greater satisfaction and fulfillment in their teaching experiences during the FGD in their teaching experience is considerably enhanced by the amount of enjoyment and challenge they experience as part of their job. As an example of this dynamic between intrinsic motivation and job satisfaction, many teachers who reported average levels of intrinsic motivation, particularly in enjoyment also experienced a sense of satisfaction or fulfillment as a result of their classroom practices. Enjoyment is defined as the personal pride or sense of accomplishment that a teacher derives from their work such as the experience of having a positive or meaningful impact on their students, while challenge is defined as the intrinsic desire to find ways to surmount adversities and improve their teaching methods.

Evidence of this relationship between intrinsic motivation and teacher satisfaction is demonstrated by teachers who have a high level of satisfaction with their teaching experience and are highly motivated by the challenges associated with teaching tend to have a greater degree of creative engagement in their classrooms. Intrinsic motivation is identified as a crucial aspect of nurturing creativity according to Amabile's (1996) Component Theory because it serves to inspire a teacher's creative efforts and thereby promotes creativity within a teacher. Teachers who possess intrinsic motivation may be more inclined to apply creativity practices in their classroom when developing new and innovative ways to solve problems.

Extrinsic Motivation: Compensation and External Recognition

Although extrinsic motives, like compensation and external recognition, were found to have an effect on task motivation; intrinsic motives appeared to influence teachers' experiences and perceptions related to creativity. Extrinsic motivation is typically driven by rewards or pressures from outside of an

individual, including salary, job security and recognition from peers and administrators. SHS teachers reported average but overall lower levels of extrinsic motivation in comparison to intrinsic motivation. The lower levels of extrinsic motivation were attributed to systemic issues including low salary, a heavy workload and limited institutional recognition. Although compensation was considered an important factor, many teachers considered that the financial compensation they received did not equate to the level of effort they exerted in the course of their work. Furthermore, the lack of external recognition for creative contributions or achievements further reduced their level of extrinsic motivation. Although external factors, such as pay and recognition, appeared meaningful to participants in the study, they were not found to have a strong relationship with teachers' creative-thinking skills.

These barriers may help explain the lack of substantial association between your teacher's motivation and their creative thinking skills. Even teachers who have a good deal of intrinsic motivation may face obstacles such as a lack of support from administration, inadequate resources, or an unsupportive school culture that prevents them from being able to teach creatively. Furthermore, if no recognition is attached to a teacher for creatively using his or her skills or being inventive in teaching, then that teacher may feel less inclined to spend their time and effort thinking creatively (i.e., using their creative thinking skills) when they believe they possess those skills. This reinforces the idea that creativity is enhanced not only by teacher motivation but also by a climate that supports and respects the contribution of creative ideas.

Comprehensive Explanation and Synchronization

The absence of substantial correlations between creativity, domain-related skills and intrinsic motivation may indicate how multifaceted creativity is as an instructional outcome for students in high school. While earnestly engaged in attempts to establish creative learning environments (yet exhibiting intuition about how) through their use of domain-specific knowledge and demonstrating a fair degree of

intrinsic motivation, teachers within high schools face obstacles created by the school system as well as lack of support for professional practice from the system(s), which creates barriers to their ability to create creative outcomes from their potential. Placing all of these factors together significantly reduces the teachers' ability to generate creativity from their professional practice.

The role external influences play on creativity also indicates it is critical to create a positive environment for innovative practices within education. Based on the findings of this research, educators who have both domain-relevant skills and intrinsic motivation may be better positioned to engage in creative teaching practices. Although these qualities can occur naturally, they must also be fostered through institutional support, sufficient resources, and acknowledgement of creativity contributions. As a result, if these systemic barriers are not addressed it will be very difficult for even the most motivated and skilled educators to convert their potential into innovative teaching practices.

Comparison

The result of this research is consistent with previous studies that highlight the role of intrinsic motivation on creativity in education (Amabile, 1996), but it does not demonstrate a statistically significant connection between motivation and creativity, which has been found in many studies (for example, Deci & Ryan, 2000). The lack of statistically significant correlations between motivation and creativity may be due to contextual factors such as lack of professional development opportunities, low level of institutional support, and lack of available resources to enable teachers to fully express their creativity.

Implications

The findings of this study show that while SHS teachers have varying levels of motivation and domain-related skills, no statistically significant relationships were found among these variables. This does not necessarily mean that these factors are unrelated, but rather that a clear connection was not observed within the sample. This suggests that improving subject

knowledge alone may not automatically lead to more creative teaching. Instead, professional development should also focus on helping teachers design and apply creative lesson strategies in actual classroom settings. More importantly, these programs should encourage teachers to use their knowledge in flexible and innovative ways, especially through student-centered approaches (Desimone et al., 2002).

In conclusion, the research findings indicate that having adequate administrative support is essential to creating and maintaining creativity. Those teachers who have limitations on their ability to be creative are either lacking sufficient funds/resources or have too many responsibilities with little/no recognition for being creative. To help develop more creative teaching practices, schools and policy makers must implement strategies to provide increased funding/resources, recognize the creative efforts of their teachers, provide their teachers with opportunities to advance their knowledge through continuous professional development, and help ensure that there is a supportive environment for teachers to further develop their creativity while implementing creative practices in their classrooms. Educational policy makers need to create policies that support enabling teachers to be more creative in implementing their teaching practices.

Though supportive of creativity, there were no clear statistically significant links between intrinsic motivation (passion, job satisfaction) and creativity; it appears that passion and job satisfaction have a role in creativity, but this does not translate into an exact measurement for this sample. Likewise, extrinsic motivation has a limited amount of impact; thus, external incentives alone do not appear to have enough of a positive effect on creative teaching methods. In summary, the findings from this study show that both internal and contextual factors should be examined when attempting to understand how teachers display creativity. The study pointed out that curricular rigidity often hinders creative thinking. Teachers noted that the standardized curriculum limits their ability to implement innovative approaches. Curriculum designers should integrate flexibility and creativity into the curriculum in order to allow teachers to explore creative teaching

strategies. Project-based learning, interdisciplinary teaching, and 21st-century skills, curriculum reforms can encourage both teachers and students to embrace creativity once promoted.

Since there were minimal identified relationships for the current study, future studies should be conducted that further investigate the interdependence between domain-specific skills, creative thinking skills, and motivation for completing tasks. Longitudinal designs tracking the shift of these interdependent variables may give researchers a clearer understanding of how teachers' creativity continues to grow, particularly as a result of targeted professional developments. More research is needed to better understand the degree to which school culture, teaching philosophy, and community support contribute to teachers' creativity.

Following the convergent parallel design, the quantitative results and qualitative themes were merged into a joint display to identify areas of convergence (agreement) or divergence (contradiction).

Domain-Relevant Skills had no statistically significant correlation with intrinsic motivation, ($r = -.078$) and extrinsic motivation ($r = .056$) as shown in Table 5. From a quantitative perspective, this may suggest that these variables are not significantly related; however, the qualitative findings indicate that contextual factors may have masked these relationships (Table 6, Topic 4).

Although educators are highly skilled in content and pedagogy (average = 3.74), their ability to apply it properly is limited by barriers created by the bureaucracy they work within, as well as a lack of sufficient facilities. Therefore, the possible existence of a relationship between educator skills and motivational factors is not evident in any measurable way because it was likely concealed by contextually induced constraints. As a result, the combined findings will make it clear why the Faculty Development Framework that was proposed must concentrate on providing organizational and structural changes and not just educational training.'

Table 7.

Research Component	Quantitative Result (N=44)	Qualitative Theme (FGD)	Meta-Inference (Integration)
Domain-Relevant Skills	High Proficiency in Domain-Relevant Skills (M=3.92).	Mixed Perceptions: Themes ranged from "Average" to "Exceptional" proficiency.	Expansion: While classroom observations show high domain-relevant skills, FGDs reveal a "lack of confidence" and need for more training.
Creative Processes	Weakness in "Resistance to Premature Closure" (M=67.14).	Barriers: "Workload" and "Bureaucratic hurdles" were cited as major hindrances.	Convergence: Systemic pressures may encourage teachers to "close" or finish tasks quickly, stifling creative exploration.
Task Motivation	Low Motivation for "Challenge" (M=2.30) and Average for "Compensation" (M=2.68).	Hindrances: "Insufficient budget" and "Multiple subject teaching."	Convergence: lower preference for challenge-oriented motivation may be associated with workload pressures and resource scarcity as identified in the FGDs.
Variable Relationships	Non-significant correlations between skills and motivation ($p > 0.05$).	Mediators: Personal problems and negative class atmosphere.	Expansion: Environmental barriers may help explain why high skills did not correspond with higher levels of motivation in the quantitative findings.

The Proposed Faculty Development Framework

Based on the integrated findings, the study proposes a multi-dimensional framework. This is not merely a list of seminars but a response to the **divergences** and **convergences** identified in the parallel strands.

Component 1: Technical-Pedagogical Upskilling

- **Source Data:** Average TTCT scores in Elaboration (M=81.41) and weak performance in resistance to premature closure and FGD Theme "Lack of experience/Inadequate training."
- **Action:** Intensive workshops on ICT integration and divergent thinking strategies.
- **Rationale:** This addresses the "Average" creativity index by equipping teachers with instructional and technological strategies identified as lacking during the FGDs.

Component 2: "Space to Create" (Structural Reform)

- **Source Data:** Weakness in "Resistance to Premature Closure" (M=67.14) and FGD Theme "Workload/Bureaucratic hurdles."

- **Action:** Streamlining administrative tasks and providing "protected time" for lesson design.
- **Rationale:** The data suggest teachers' creative potential may be constrained by workloads and institutional demands which often leave them feeling "rushed." This component aims to address the systemic pressures that may contribute to premature closure as reflected in the TTCT results.

Component 3: Motivational Incentivization & Wellbeing

- **Source Data:** Low "Challenge" motivation (M=2.30) and FGD Theme "Salary/Rest and Recreation."
- **Action:** Implementation of a merit-based recognition system and wellness-oriented programs for teachers.
- **Rationale:** Since enjoyment emerged as a stronger source of internal motivation than challenge, this component focuses on strengthening teachers' motivation toward professional growth, engagement, and challenging work-related tasks while also supporting teacher wellbeing.

Framework Pillar	Driven by (Quantitative)	Driven by (Qualitative)
Professional Development	Average Elaboration and Weak Resistance to Premature Closure	Requests for "Seminars/Advanced Education"
Organizational Change	Low Closure Resistance	Complaints of "Workload/Facilities"
Culture & Policy	Low Extrinsic/Compensation scores	Desire for "Administrative Support/Salary"

The goal of this research is to create a framework to support the improvement of SHS teachers' creativity, skills and effectiveness through faculty development. It includes a number of different supports based on the approach outlined above, as well as strategies for

creative thinking, collaborative work and continual learning, allowing for teacher success at both their jobs and as they deal with new educational issues.

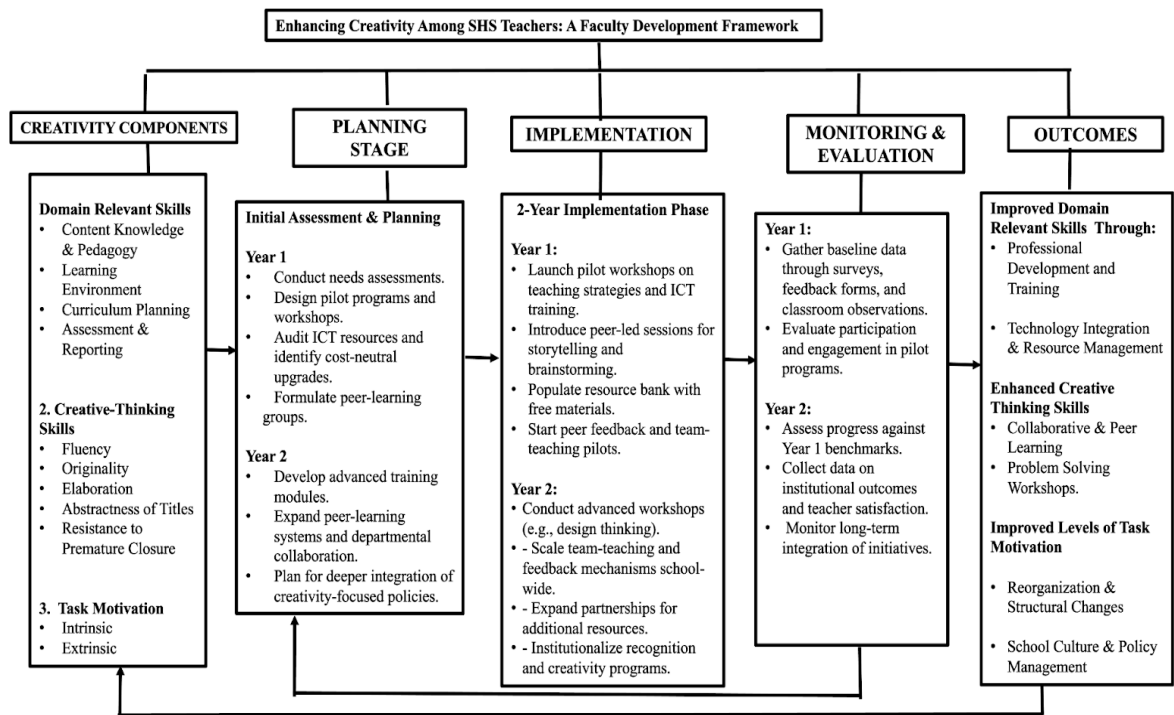


Figure 1. The faculty development framework to enhance creativity among SHS teachers at BTECH, Baliwag, Bulacan.

Utilizing empirical evidence derived from the results of PPST, TTCT, WPI, and FGD allows for the identification of the specific needs of SHS teachers and the challenges they encounter in their efforts to prepare students for post-secondary education and/or the workforce. In this context, the objective is to develop SHS teachers' creative capabilities to promote innovation and flexibility among students by utilizing a five-phase framework with integrated phases or steps that will provide support to SHS teachers throughout their BTECH study experience. In addition, Amabile's Componential Theory of Creativity also provides a theoretical basis for the framework.

Creativity Components is the foundation of the framework. The Creativity Components are comprised of domain-related skills, creative thinking skills, as well as task motivation. Competency in these areas supports educators at the senior high school level in providing high-quality, engaging instructional experiences for students. The second phase of the framework focuses on the Planning Stage, during which specific strategies are developed in response to the specific needs of educators at the senior

high school level. Year 1 of the framework will focus on performing needs assessments of the areas where educators at the senior high school level, designing pilot programs/workshops to meet the instructional needs of educators at the senior high school level, conducting an audit of the educational institution's resources to support the use of digital literacy, and creating a peer-learning network of educators at the senior high school level for collaborative professional learning. These activities will be critical for addressing such challenges as a lack of resources and the need to adapt to the diverse learning needs of students. During Year 2, Advanced Planning Apps will develop professional development (training) modules that will focus on Innovative Teaching Techniques and support the implementation of peer-based (collaborative) learning systems for high schools. Additionally, there will be integration of policies designed to promote innovative or creative teaching with a focus on providing high school teachers with the tools necessary to facilitate their students obtaining academic and career goals.

Following the Planning Phase, the Implementation Phase takes place over a two-year period during which the planning is executed. Teachers in SHS will be involved in Year 1 in pilot workshops that focus on the implementation of innovative teaching methodologies, the integration of ICT into their classrooms, and collaboration (an example of collaborative practice is using storytelling and brainstorming to solve problems). These initiatives provide an opportunity for teachers to develop their creative skills through hands-on experiences and the application of what they have learned. Resource banks of free materials will be developed and populated to address the challenges faced by teachers due to a lack of teaching aids (from an initial pool of resources) and mechanisms for team-teaching and peer feedback will be implemented to develop a culture of collaboration. In Year 2, the implementation process will expand beyond just pilot workshops to include the delivery of design-thinking focused workshops, the development and implementation of institutionalized recognition programs for motivating teachers, and the creation of partnerships to increase access to materials and other resources. The goal of this work is to embed creativity into the teaching culture at BTECH, so that SHS teachers have the tools and support they need to respond to the evolving demands of the educational landscape and ultimately be able to effectively utilize their students' creative abilities as well.

The framework for these initiatives includes a Monitoring and Evaluation phase to maximize their effectiveness. During Year 1 of the pilot program, baseline data will be collected by way of surveys, feedback from participants in the program, and classroom visits to help determine how many participants were engaged in the program. The data collected will also be used during the pilot program to make adjustments based on information provided by participants while participating in the program. In Year 2 of the pilot program, we will compare the progress made by each site against the baseline data from the previous year. Data on both teacher satisfaction and school-wide outcomes will be collected, as well. The monitoring portion of the evaluation framework will help ensure that the initiatives

remain relevant and useful by providing insights that can be used during the planning phase of the subsequent year to enhance programmatic strategies.

The final outcomes of the framework demonstrate how successful the efforts will be in developing a culture that promotes professional development as it relates to SHS teachers' professional development. Updated outcomes highlight how SHS teachers have improved their domain-related skills through ongoing professional development and technology integration; thus, enabling them to perform competently in addressing 21st century educational issues. To develop enhanced creative thinking skills, SHS teachers have had the opportunity to work collaboratively with their peers through peer mentoring and coaching opportunities by participating in problem solving workshops. All of these opportunities have allowed SHS teachers to engage students in more critical and creative work. Structural changes to motivate SHS teachers to complete tasks, combined with an adequate support system at the school, will also help to address both intrinsic and extrinsic motivation factors for motivating SHS teachers to succeed in their roles as educators. The updated outcomes reflect the current realities of SHS teachers and will empower them to develop new responses to the changes and educational challenges they face as teachers within their classroom environment.

The arrows indicating the different stages point to the fact that the framework evolves with time, being both successive and iterative. This evolution is seen in how the framework moves through the various stages of becoming competent and gaining expertise (foundational skills), planning and implementing services, monitoring service delivery, determining service delivery outcomes, etc. Additionally, the feedback loop shown represents the fact that the outcomes of monitoring and evaluating services can impact future planning, thereby allowing the framework to continuously respond to the changing needs of Secondary High School (SHS) teachers.

This framework has been designed and adapted to reflect the actual conditions that face SHS teachers. The goal of this framework

is to provide SHS teachers with the tools, motivation, assistance, and encouragement necessary to help their students develop the abilities they need to create in their own classrooms. It will provide SHS teachers the opportunity to excel in their jobs through a well-defined, collaborative, and sustainable model based on established educational principles and practices as well as the established guidelines of the SHS profession to encourage creativity in the students they teach.

Theoretical Basis

The theoretical foundation of the framework was based on Amabile's Componential Theory of Creativity, which emphasizes intrinsic motivation, domain-relevant skills, and creative thinking skills, and is supported by empirical results from the Work Preference Inventory, the Torrance Tests of Creative Thinking, and insights from the Focus Group Discussion on teacher motivation and creativity at BTECH.

Conclusion

Using a convergent parallel mixed-methods design, researchers studied the relationships between domain-relevant skills, creative thinking, and task motivation of Senior High School teachers. The results showed that SHS teachers obtained high levels of domain-relevant skills but had only average levels of both creative thinking and overall motivation. Additionally, although the teachers exhibited greater levels of intrinsic as compared to extrinsic motivation, overall motivation was still average in nature.

The correlation analyses did not reveal any statistically significant correlations between domain relevant skills, creative thinking, and motivation to complete the task at hand indicating that a teacher's creativity, when constrained within the present sample, were not clearly explained by these three variables within the present sample. The qualitative findings further suggested that socio-contextual and institutional factors (e.g., resource availability, workload, and administrative support) are essential for facilitating teachers' creativity.

Integrating qualitative and quantitative data shows that a teacher's ability to be crea-

tive is affected by both individual characteristics and environmental factors. Teachers demonstrated high levels of domain-relevant skills and average levels of motivation; however, they may have less opportunity to express this creativity due to extenuating circumstances. These results highlight the importance of taking both personal and contextual factors into account when designing programs to support teachers in their creative teaching efforts.

According to the aforementioned insights, the proposed faculty development framework emphasizes the importance of institutional support, resource provision, and professional development as a means to support teacher creativity. Future initiatives designed to promote teacher creativity within education should be focused not just on improving an individual's skills but also in helping to create environments that encourage increased innovative and effective teaching.

Recommendations

1. Future studies may investigate how individual differences (e.g., personality traits, experience), contextual factors (e.g., school culture, leadership), and instructional practices (e.g., teaching methodologies, curriculum design) influence the relationship among domain knowledge, creative thinking, and motivation.
2. Future research can include a broader and more diverse group of SHS teachers from different backgrounds, different teaching areas and in different locations to enhance generalizability and to allow for analysis of the different sub-groups.
3. Future research may include various sources of evidence like classroom observations and student responses in order to create a better picture about teaching creativity, instructional effectiveness and engagement. Future research will also examine how important factors like leadership, professional development and institutional policies impact a teacher's creative autonomy and motivation.
4. It will be important for future research to take into account the views of school administrators who have a major influence over teacher creativity and motivation by

providing policy, resource and support systems for teachers. They can also examine student factors like motivation, conduct, learning style, etc., and how those factors work with instructional Domain knowledge (DK) and teacher instructional strategies, and how they contribute to teacher creativity and motivation.

Contributions of Authors

The authors affirm that they have contributed solely to the conception, design, execution, and writing of this study. The authors affirm that they have contributed solely to the conception, design, execution, and writing of this study

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Conflict of Interests

The authors declare no conflict of interest.

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