



Pedagogical Skills and Strategies among Business-Related Subject Teachers

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Abstract

This study used a descriptive-correlational approach to investigate the connection between teaching methods, pedagogical abilities, and teacher characteristics in business education within the Division of Dinagat Islands. It was discovered that a sizable percentage of instructors assigned to business and entrepreneurship courses majored in mathematics, science, or TVL, with less than 20% having a relevant major. The predominance of teachers in non-senior roles and the out-of-field teaching may point to a mismatch between credentials and subject assignments, highlighting areas for targeted support and professional development. The study also revealed significant differences in classroom management skills based on employment status, suggesting variations in training, experience, or institutional support between permanent and non-permanent teachers. Additionally, differentiation skills varied significantly based on specialization and teaching positions, implying that specialist teachers might possess different pedagogical approaches, content knowledge, or familiarity with differentiation techniques specific to business-related subjects. To address the mismatch in specialization and the scarcity of teachers in higher positions, the Schools Division Office (SDO) is advised to review its hiring policies and mandates, and consider promoting senior high school teachers to higher positions.

Keyword: Descriptive-Correlational, Teaching Strategies, Pedagogical Skills, Business-Related Subjects, Differentiation Skills, Senior High School

1. Introduction

The implementation of Republic Act 10533 restructured the Philippine basic education system from a 10-year to a 12-year cycle, introducing two additional years of senior high school to prepare students for work, college, and business readiness. Despite these reforms, challenges remain, particularly in the business-related curriculum, where many teachers lack sufficient knowledge of diverse teaching strategies (Mingala-Pagay, 2019; Mordeno, 2022). Globally, similar issues persist, as the use of inefficient teaching strategies is linked to poor student performance (Ganyaupfu, 2013), while the adoption of varied approaches has been shown to enhance engagement, interaction, and the development of entrepreneurial skills (Ohaka & Nnokam, 2018). In the Philippine context, teachers in the Accountancy, Business, and Management (ABM) strand often rely heavily on lecture-based instruction, resulting in limited student engagement (Mingala-Pagay et al., 2019), and many report low application of pedagogical skills in areas such as classroom management and assessment (Mordeno, 2022). In the Division of Dinagat Islands, these concerns are reflected in low Key Results Area scores for teachers handling applied and specialized business-related subjects. This study aims to examine the teaching strategies and pedagogical skills of these teachers to provide insights for targeted training and professional development programs that can improve instructional practices, strengthen human resource development, and equip students to become future business leaders who can drive economic growth.

Theoretical Framework (Based on K-12, ABM Framework)

This study is grounded in the social constructivist theory, which posits that learning is a social process facilitated by effective teaching practices that encourage social interaction, student engagement, and knowledge construction (Vygotsky, 1978). The K-12 Enhanced Basic Education frameworks further support this by drawing on various learning theories and providing teachers with a range of instructional models and techniques. These include direct instruction, focusing on sequential and organized teaching; indirect instruction, emphasizing student-led learning; interactive instruction, promoting engagement and collaboration; experiential instruction, providing firsthand learning experiences; and independent study, fostering self-directed learning. Additionally, the framework recognizes pedagogical skills like classroom management, formative assessment, technology integration, and differentiation as crucial for effective teaching and learning (Saskatchewan Education, 1991; DepEd Order No. 42, s. 2016).

Conceptual Framework

Figure 1 presents a schematic diagram outlining the components, their function, and flow within the study. The first box details the teacher's profile, including gender, age, years of teaching experience, area of specialization, employment status, and position. Collecting such respondent profiles enables researchers to identify potential differences in responses or experiences among various groups. The inclusion of sex as a variable acknowledges its potential influence on respondents' experiences, attitudes, and behavior, as research has shown that biological and sociocultural factors linked to sex can lead to disparities in various outcomes. Age is considered due to its impact on physical, cognitive, and socioemotional development, with research demonstrating age-related differences in memory performance. The number of years of teaching experience is included as it can influence pedagogical practices, instructional effectiveness, and professional development. The teacher's subject focus can provide insights into their expertise and knowledge base, which is particularly relevant when studying phenomena specific to a certain subject, instructional approach, or disciplinary nuances. Employment status is another variable that can affect teachers' experiences, attitudes, and behavior, with studies linking it to job satisfaction. Understanding participants' positions within the organizational hierarchy helps researchers interpret their roles and responsibilities. The second box focuses on the level of practice by teachers regarding research-based teaching strategies, such as active learning, cooperative learning, inquiry-based learning, differentiated instruction, blended learning, and metacognitive strategies. The third box examines the extent of teachers' pedagogical skills (classroom management, formative assessment, technology integration, and differentiation) in relation to their teaching strategies, utilizing correlational analysis. In summary, Figure 1 provides a visual representation of the study's framework, highlighting the variables under investigation and the analytical approach employed to explore the relationships between them.

The link between the stated variables served as the basis for the Policy Recommendation for Human Resource Development.

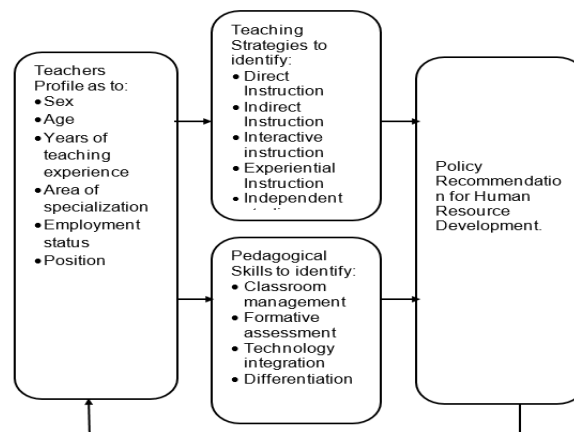


Figure 1 Schematic Diagram of the Study

Statement of the Problem

This study aims to explore the teaching strategies and pedagogical skills of teachers teaching business related subjects in the Division of Dinagat Islands. Specifically, it sought to answer the following:

1. What is the profile of the Senior High School teachers in the Division of Dinagat Islands handling business-related subjects as to:
 - 1.1. Sex
 - 1.2. Age
 - 1.3. Years of teaching experience
 - 1.4. Area of specialization
 - 1.5. Employment status
 - 1.6. Position
2. What is the level of practice of respondents handling business-related subjects in terms of the following teaching strategies?
 - 2.1. Direct Instruction
 - 2.2. Indirect Instruction
 - 2.3. Interactive instruction
 - 2.4. Experiential Instruction
 - 2.5. Independent studies
3. What is the extent of pedagogical skills among the respondents based on the following indicators?
4. 1. Classroom management
 - 4.1.1. 3. 2. Formative assessment
 - 4.1.2. 3. 3. Technology integration
 - 4.1.3. 3. 4. Differentiation
5. Is there a significant difference between teaching strategies and pedagogical skills of the respondents when grouped according to profile variables?
6. Is there a significant relationship between respondent's level of practices among the mentioned teaching strategies and their extent of pedagogical skills?
7. Based on the findings of the study, what policy recommendation may be proposed?

Hypotheses

The following hypotheses will be tested at 0.05 level of significance:

H₀ 1. There is no significant difference between teaching strategies and pedagogical skills of the respondents when grouped according to profile variables.

H₀ 2. There is no significant relationship between respondent's level of practices among the mentioned teaching strategies and their extent of pedagogical skills.

Significance of the Study

This research benefits various stakeholders. Teachers will gain insights into effective teaching strategies, leading to improved instructional efficacy and professional development, potentially increasing job satisfaction and retention. Human Resource management and Development Officers will receive valuable information to inform policy and curriculum development at different levels. Schools can utilize the findings to guide policy decisions, potentially mandating or supporting specific teaching approaches. Students will benefit from enhanced learning outcomes, including academic achievement, critical thinking, and problem-solving skills. School heads can leverage the study's insights to improve their operations. Communities will thrive due to improved educational outcomes, as educated individuals contribute to social, cultural, and economic progress. Lastly, future researchers can build upon this research to expand our understanding of instructional strategies and advance educational theory and practice.

2. Review of Related Literature

The latter two years of the K-12 Basic Education Program, known as Senior High School (SHS), encompass Grades 11 and 12, where students delve into a core curriculum and subjects within their chosen track. The K-12 Program serves as a catalyst for regional and societal development, aiming to nurture the potential of Filipino youth and contribute to individual, community, and national progress (DM 76, s. 2016). The Department of Education (2016) emphasizes that the SHS curriculum strives to produce graduates with holistic development, 21st-century skills, and preparedness for diverse future pathways. Within the academic track, the Accountancy, Business, and Management (ABM) strand provides students with a foundation in business principles, preparing them for real-world scenarios and future studies through the exploration of theories, perspectives, and concepts in business, accounting, marketing, and entrepreneurship (Systems Plus College Foundation (n.d.)). The ABM strand equips students with analytical and practical skills to navigate the evolving business landscape. Specialized business subjects within the curriculum, such as Fundamentals of Accountancy, Business, and Management (FABM), further enhance students' understanding of financial analysis and decision-making (Department of Education, FABM 1 & 2 Curriculum Guides, 2016). However, previous research has highlighted challenges in curriculum implementation, including difficulties with specific accounting concepts and time management (Martin Jr. et al., 2020; Belando, 2019). Teaching strategies employed in business-related subjects are crucial for effective instruction. While research suggests a range of approaches, studies in the Philippines indicate a prevalence of direct instruction and limited use of other strategies. Students express a preference for lectures, group projects, and independent study, emphasizing the importance of student-centered approaches. The choice of teaching strategies is influenced by factors like self-efficacy, outcome expectations, work satisfaction, and personal interest (Oben and Van Rooyen, 2022; Shah, Shilpa & Udgaonkar, Usha, 2018). Pedagogical skills, defined as a teacher's ability to guide and manage students, are fundamental to effective teaching (OECD, 2005). These skills involve knowledge acquisition, student understanding, parent interaction, collaboration, and creating equitable policies. Pedagogical competence significantly impacts teaching methodology and curriculum choices (Jones & Moreland, 2015). Continuous professional development is crucial for educators to refine their skills and knowledge, ensuring high-quality instruction (Obanya, 2018; Sanyal, 2013). Effective teaching necessitates a diverse range of instructional strategies, opportunities, and materials to address various cognitive goals. Research has further highlighted the importance of up-to-date technology and effective classroom management in teaching business subjects (Nwaukwu, 2019).

3. Methodology

This study employed a descriptive-correlational research design, utilizing descriptive statistics to reveal key characteristics of the collected data and establishing relationships between variables. A total enumeration sampling technique was used to select teachers handling business-related subjects from public schools in the Division of Dinagat Islands. Data was collected through a researcher-made survey questionnaire validated by experts. The questionnaire consisted of three parts: Part I gathered teacher profile information, Part II assessed the level of practice of various teaching strategies using a 4-point Likert scale, and Part III evaluated the extent of pedagogical skills using a similar scale. Data analysis involved descriptive and inferential statistics, including frequency count, percentage, mean, standard deviation, one-way ANOVA/Kruskal-Wallis H Test, and Pearson r /Spearman ρ correlation techniques, using Jamovi software. Ethical considerations included ensuring participant willingness and informed consent, maintaining confidentiality and anonymity, minimizing risks, and prioritizing beneficence. The study covered Senior High School—implementing schools across various districts in the Division of Dinagat Islands, with a total of 75 target respondents. In Albor I, 6 teachers were from Albor NHS and 2 from Osmeña Sto. Niño NHS, while Albor II had 2 each from General Aguinaldo NHS and Rosita NHS. Cagdianao East included 1 from Del Pilar NHS and 5 from Cagdianao NHS, and Cagdianao West had 5 from R. E. Ecleo NHS and 2 from Valencia NHS. In Dinagat, there were 4 respondents from Dinagat School of Fisheries and 2 from Premitivo J. Ebo NHS. Loreto had 5 from Loreto SHS and 2 from Liberty NHS. Rizal I recorded 2 from Tag Abaca NHS and 2 from Doña Helen NHS, while Rizal II had 5 from Sering NHS and 2 from PPM NHS. San Jose contributed the highest number, with 10 from DREESM NHS, 4 from JBE NHS, and 2 from Cuarenta NHS. Lastly, Tubajon had 6 from Tubajon NHS, 2 from Malinao NHS, and 2 from Mabini NHS. The responses are described and interpreted based on the following parameters. The study utilized a four-point Likert scale to interpret responses, where a mean score of 3.25 to 4.00 corresponds to Strongly Agree, indicating a Highly Proficient qualitative description. Scores from 2.50

to 3.24 represent Agree, classified as Proficient. Mean values between 1.75 and 2.49 reflect Disagree, interpreted as Developing, while scores from 1.00 to 1.74 denote Strongly Disagree, corresponding to the Beginning level of proficiency.

4. Results and Discussion

Table 1. Profile of the Respondents

Profile Variables		Frequency (n=75)	Percentage
Sex	Male	21	28.00
	Female	54	72.00
Age	23 years old and below	1	1.33
	24 – 28 years old	22	29.33
	29 – 33 years old	27	36.00
	34 – 38 years old	11	14.67
	39 – 43 years old	7	9.33
	44 – 48 years old	3	4.00
	49 – 53 years old	2	2.67
	54 – 58 years old	1	1.33
	59 years old and above	1	1.33
Years of Teaching Experience	Less than 1 year	0	0.0
	1-5 years	33	44.0
	6-10 years	37	49.3
	11-15 years	1	1.3
	16-20 years	1	1.3
	21 years and above	3	4.0
Area of Specialization	English	13	17.33
	Math	16	21.33
	Science	15	20.00
	Business and Entrepreneurship	13	17.33
	Filipino	1	1.33
	Social Science	2	2.67
	TVL	15	20.00
Employment Status	Casual	1	1.33
	Permanent	71	94.67
	Others (non-permanent)	3	4.00
Position	Teacher I-III	67	89.33
	Master Teacher I- IV	4	5.33
	Others (substitute teacher)	4	5.33

As shown in table 1, the majority of teachers handling business-related subjects in the Schools Division of Dinagat Islands are young females in their early adulthood years. Most are new to the profession, with only a few having substantial teaching experience. Although most are permanent teachers in Teacher I-III positions, a concerning number are teaching business subjects outside their specialization, primarily with backgrounds in Mathematics, Science, and TVL. This out-of-field teaching raises concerns about teaching quality, particularly for senior high school subjects with technical and critical content crucial for tertiary education preparation. Research emphasizes the importance of teaching experience (Papay and West, 2021; Chingos and Peterson, 2012) and subject-matter expertise (Ingersoll and May, 2011; Johnson and Darling-Hammond, 2015) for effective instruction. Therefore, addressing these issues is crucial for enhancing the quality of business education in the region.

Table 2. Level of Practice of Teachers Handling Business-Related Subjects Using Direct Instruction

No.	Indicators	M	SD	VI	QD
1	I have introduced objectives which students should be able to do or an action they should be able to perform at the end of the lesson	3.80	0.403	SA	HP
2	I showed detailed outline on the board which includes main subjects of that day's lesson and the various facts and concepts before starting class.	3.59	0.496	SA	HP
3	I displayed the movements that are needed to obtain the desired results of the topic.	3.53	0.502	SA	HP
4	I have demonstrated the process while providing appropriate explanations of what is happening.	3.64	0.483	SA	HP
5	I made sure to arrange the sequence of learning steps so that each one builds upon the skills obtained at the previous stage	3.59	0.522	SA	HP
AVERAGE		3.63	0.481	SA	HP

The data in Table 2 shows that teachers handling business-related subjects demonstrate a high proficiency in using direct instruction, with an overall mean of 3.63 (SD=0.481). They are particularly adept at introducing clear objectives at the beginning of lessons and providing step-by-step demonstrations with explanations. However, they are slightly less proficient in displaying movements needed to achieve desired learning outcomes. Research supports the effectiveness of direct instruction in business-related subjects, with studies showing improved learning outcomes and student satisfaction when objectives are clear and explanations are structured (Jubb and Mulgrew, 2019; Huang, 2018; Gao, 2018; Li and Schedlbauer, 2017).

Table 3. Level of Practice of Teachers Handling Business-Related Subjects as to Indirect Instruction

No.	Indicators	M	SD	VI	QD
1	I provided activities involving case study to teach students how to apply theory in practice.	3.35	0.626	SA	HP
2	I gave activities involving problem solving	3.67	0.502	SA	HP
3	I used concept mapping activities to emphasize concept in charts and graphs.	3.45	0.527	SA	HP
4	I used cloze procedure in assessment where parts of the passage are committed to complete by the learners.	3.28	0.689	SA	HP
5	I initiate the discussion by asking a question that requires students to reflect upon and interpret films, experiences, read or recorded stories, or illustrations.	3.53	0.553	SA	HP
AVERAGE		3.46	0.579	SA	HP

The data in table 3 indicate that teachers are highly proficient in utilizing indirect instruction, with an overall mean of 3.46 (SD=0.579). They particularly excel at incorporating problem-solving activities and initiating discussions that encourage reflection and interpretation. This aligns with the demands of business-related courses like accounting and business mathematics, which require strong numeracy and critical thinking skills. Problem-solving tasks foster essential skills for both academic success and real-world application. Inquiry-based activities promote active learning and deeper understanding of business concepts. Research supports the effectiveness of indirect instruction methods like Problem-Based Learning (PBL) and Inquiry-Based Learning (IBL) in enhancing learning outcomes and student engagement (Wang, 2019; Chowdhury, 2018). While teachers are still highly proficient in using cloze procedures, this strategy is perceived as slightly less practiced compared to other indirect instruction methods. Cloze procedures assess students' comprehension and ability to apply theoretical knowledge, making them valuable for business-related subjects. Studies confirm the effectiveness of cloze procedures in measuring understanding of complex financial concepts and interpreting business-related texts (Espiritu and Pajo, 2018; Zhang, 2016).

Table 4. Level of Practice of Teachers Handling Business-Related Subjects Using Interactive Instruction

No.	Indicators	M	SD	VI	QD
1	I created activities that promotes brainstorming using mind maps to improve information gathering abilities of students.	4.12	4.577	SA	HP
2	I have engaged learners in debate to promote problem solving and creative thinking.	3.56	0.526	SA	HP
3	I gave activities such as an interview to enhance their comprehension skills and self-confidence.	3.56	0.575	SA	HP
4	I let learners engage in a small group discussion to improve relationship with peers and promotes psychological well-being.	3.61	0.490	SA	HP
5	I encourage learners to learn from one another and to articulate course content in their own words.	3.64	0.483	SA	HP
AVERAGE		3.70	1.330	SA	HP

The data in Table 4 demonstrate that teachers are highly proficient in using interactive instruction for business-related subjects, with an overall mean of 3.70 (SD=1.330). They particularly excel at promoting brainstorming activities and fostering collaboration among learners. Brainstorming empowers students to actively engage with the course material, think critically and creatively, and take ownership of their learning. Collaboration fosters teamwork and cooperation, preparing students for real-world challenges. Research supports the effectiveness of collaborative learning strategies in improving academic performance, engagement, and critical thinking skills (Wang, 2019). While teachers are still highly proficient in using debates and interviews, these activities are perceived as slightly less prioritized. Debates foster active engagement and ethical reasoning (Baker, 2017; Weaver, 2019), while interviews enhance critical thinking and understanding of accounting concepts (De Noble, 2016; Chowdhury and Brignall, 2019).

Table 5. Level of Practice of Teachers Handling Business-Related Subjects Using Experiential Instruction

No.	Indicators	M	SD	VI	QD
1	I have applied games in activities to encourage motivation and participation for learners	3.39	0.613	SA	HP
2	I have engaged learners in field trips which allow them to collaborate with their peers, make connections, and explore new environments.	2.68	0.932	A	P
3	I exposed them to field observation to help them understand the community or of a context that can come only from personal experience.	2.87	0.759	A	P
4	I involve them in a role play activity to build confidence and practice and develop their social skills.	3.45	0.664	SA	HP
5	I employed simulation activity to promote the use of critical and evaluative thinking.	3.59	0.522	SA	HP
AVERAGE		3.20	0.698	A	P

Table 5 shows that teachers exhibit proficiency in experiential instruction, with an overall mean of 3.20 (SD=0.698). They are particularly skilled at employing simulation activities and role plays, which promote critical thinking, decision-making, and practical application of business concepts. Research supports the positive impact of business simulations on student engagement, knowledge acquisition, and skills development (Gegenfurtner et al., 2019; Balakrishnan & Fernandez, 2018). While teachers are proficient in organizing field trips and onsite observations, these activities are less frequently implemented, likely due to logistical challenges and regulations. However, these authentic experiences offer valuable opportunities for students to connect theoretical knowledge with real-world business environments, develop professional skills, and gain industry insights. Studies confirm the positive effects of field trips and observations on student learning outcomes and skill development (Smith and Johnson, 2021; Garcia and Lee, 2021).

Table 6. Level of Practice of Teachers Handling Business-Related Subjects Using Independent Studies

No.	Indicators	M	SD	VI	QD
1	I gave homework to the learners, so they take responsibility for their part in the educational process.	3.72	0.452	SA	HP
2	I use essay activities to develop learner's research skills, improve arguments and think beyond what they learn in the classroom.	3.79	0.412	SA	HP
3	I used computer assisted instruction to enhance learning using combination of text, graphics, sound, video tutorials, drills, and problems to help present topics and test the student's understanding.	3.51	0.529	SA	HP
4	I have applied research to certain topics to allow learners to study and analyze phenomena and find solutions to the problem.	3.65	0.507	SA	HP
5	I provide lessons and assignments in the mail or by e-mail and learners then return completed assignments in order to receive a grade.	3.44	0.663	SA	HP
AVERAGE		3.62	0.513	SA	HP

Table 6vshows that teachers are highly proficient in utilizing independent study as a teaching strategy, with an overall mean of 3.62 (SD=0.513). They particularly favor giving homework and using essay activities, recognizing their potential to foster independent learning and critical thinking skills. Research supports the positive impact of written assignments on student learning outcomes and engagement, enhancing communication skills and the application of course concepts (Smith and Brown, 2021; Garcia and Patel, 2021). While teachers are still highly proficient in providing lessons and assignments through email, this method is considered less prioritized. Email communication may limit interaction and feedback, posing challenges for managing assignments and tracking progress in independent studies. However, it remains a valuable tool for connecting during asynchronous learning. Research on synchronous and asynchronous communication methods, including email, can offer insights into its effectiveness compared to other methods in online learning environments (Lee et al., 2020).

Table 7. Extent of Pedagogical Skills of Teachers Handling Business-Related Subjects as to Classroom Management

No.	Indicators	M	SD	VI	QD
1	I posted classroom daily schedule of class activities where all students and staff can see it.	3.55	0.501	SA	HP
2	I reviewed schedules with students/teacher on a regular basis as a tool to teach organizational/planning skills.	3.56	0.526	SA	HP
3	I posted classroom rules regarding behavior expectations, and taught, reviewed, and reinforced on a regular basis.	3.72	0.452	SA	HP
4	I gave students adequate access to positive reinforcement and feedback from teachers	3.67	0.528	SA	HP
5	I develop instructional programs for planning/organizational skills and specify setting, materials, prompts, error correction and reinforcement.	3.29	0.693	SA	HP
AVERAGE		3.56	0.540	SA	HP

Table 7 indicates that teachers are highly proficient in classroom management, with an overall mean of 3.56 (SD=0.540). They excel at posting classroom rules and utilizing positive reinforcement and feedback, which are essential for fostering accountability, responsibility, and a conducive learning environment. Research supports the positive impact of clear classroom rules and positive feedback on student behavior, engagement, and perceptions of the classroom climate (Wang et al., 2020; Smith and Johnson, 2021). While still highly proficient, teachers scored slightly lower on developing instructional programs for planning/organizational skills. However, they remain capable of designing effective instructional strategies and materials. Research demonstrates that well-developed instructional programs lead to increased student satisfaction and positive learning outcomes in entrepreneurship education (Wang et. al, 2022).

Table 8. Extent of Pedagogical Skills of Teachers Handling Business-Related Subjects as to Formative Assessment

No.	Indicators	M	SD	VI	QD
1	I have provided live multiple-choice questions that ask students about your current lesson.	3.69	0.545	SA	HP
2	Before proceeding to the next topic, I ask students to recall what they learned last week or even yesterday to check if important information has been retained and what may have been overlooked	3.76	0.430	SA	HP
3	I ask students after the lesson if they found the class informative, whether it was engaging enough to make concentrating easy, or if it was an enjoyable way of learning.	3.68	0.470	SA	HP
4	I consistently ask question and require learners to submit a one-word or short response to your question	3.63	0.487	SA	HP
5	I allow students to evaluate their own work, encouraging them to learn their own strengths and weaknesses.	3.68	0.470	SA	HP
AVERAGE		3.69	0.480	SA	HP

As shown in table 8, teachers exhibit a high proficiency in utilizing formative assessments, with an overall mean of 3.69 (SD=0.480). They are particularly adept at using live multiple-choice questions and topic recalling techniques, which provide immediate feedback and promote active learning, respectively. Research supports the positive impact of these techniques on instruction quality, student satisfaction, and learning gains (Chen et. al, 2021; Nguyen et. al, 2022). While still highly proficient, teachers scored slightly lower on consistently asking questions that require short responses. However, this technique remains valuable for assessing learning progress and adjusting instruction. Studies indicate that short response assessments can promote active learning, critical thinking, and student satisfaction (Patel et. al, 2020; Rodriguez and Hernandez, 2021).

Table 9. Extent of Pedagogical Skills of Teachers Handling Business-Related Subjects as to Technology Integration

No.	Indicators	M	SD	VI	QD
1	I used PowerPoint presentations to introduce a classroom concept along with the use of graphics and bulleted information, links to videos that accompany the ideas presented within the slides.	3.75	0.522	SA	HP
2	I post homework assignments online (via learning platforms like Blackboard, Brightspace, and Moodle etc.).	3.44	0.575	SA	HP
3	I allow students to use their tablets and mobile phones to aid in their activities and work at their own pace during the lesson.	3.32	0.573	SA	HP
4	I teach Microsoft Office and Google Drive application to students to make spreadsheets, slide show presentations, and share documents where they can receive fluid feedback on their work.	3.31	0.636	SA	HP
5	I introduce students with different learning sites that can help them to gain additional information to finish assigned task.	3.52	0.578	SA	HP
AVERAGE		3.47	0.577	SA	HP

Table 9 shows that teachers exhibit a high proficiency in technology integration, with an overall mean of 3.47 (SD=0.577). They are particularly skilled at using PowerPoint presentations and exposing learners to relevant learning sites. PowerPoint presentations serve as a versatile tool for delivering lessons, facilitating discussions, and presenting multimedia content, while access to diverse learning sites enriches students' learning experiences. Research confirms the positive impact of PowerPoint presentations on instructional quality and student understanding (Singh et. al, 2022; Garcia-Martinez et. al, 2023). Although teachers believe they are highly proficient in teaching Microsoft Office and Google Drive applications, this aspect receives the lowest mean value, suggesting potential challenges in implementation. Factors like access to gadgets and internet connectivity, especially for students, might hinder full utilization of these tools. However, research supports the effectiveness of these productivity tools in improving organization, communication, and learning outcomes (Gupta et. al, 2021; Hernandez et. al, 2022).

Table 10. Extent of Pedagogical Skills of Teachers Handling Business-Related Subjects as to Differentiation

No.	Indicators	M	SD	VI	QD
1	I modify my content strategies to different groups of students with diverse learning needs.	3.56	0.500	SA	HP
2	I provided activities and assessment based on the student's level of understanding.	3.69	0.464	SA	HP
3	I grouped learners and allowed them to perform task based on their interest.	3.63	0.514	SA	HP
4	I group learners with similar learning styles.	3.61	0.590	SA	HP
5	I tailored my lesson plans to individual students' needs to ensure that all students receive the most effective form of learning.	3.53	0.528	SA	HP
AVERAGE		3.60	0.519	SA	HP

In table 10, teachers perceive themselves as highly proficient in differentiation, with an overall mean of 3.60 (SD=0.519). They particularly excel at providing activities and assessments tailored to students' understanding and grouping learners based on their interests. These practices allow for personalized learning experiences and cater to diverse student needs. Research supports the positive impact of differentiation on student outcomes, including enhanced learning gains, critical thinking skills, and motivation (Wu et. al, 2023; Tan et. al, 2020). While still highly proficient, teachers scored slightly lower on tailoring lesson plans to individual student needs. However, they recognize the importance of differentiation in ensuring effective instruction. Studies demonstrate that differentiated instruction leads to increased academic growth, deeper understanding, and knowledge retention (Gupta, 2020; Fernandez, 2023).

Table 11. Difference between Teaching Strategies of the Respondents When Grouped According to Profile Variables

Teaching Strategies		Sex*	Teaching Experience	Specialization	Employment Status	Position
Direct Instruction	F	-1.364	0.456	0.455	4.265	0.442
	p-value	0.177	0.932	0.839	0.018**	0.644
	Decision to H ₀	Not Rejected	Not Rejected	Not Rejected	Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Significant	Not Significant
Indirect Instruction	F	0.625	0.859	1.361	4.321	1.169
	p-value	0.534	0.591	0.243	0.017**	0.316
	Decision to H ₀	Not Rejected	Not Rejected	Not Rejected	Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Significant	Not Significant
Interactive Instruction	F	-0.503	0.225	0.969	0.160	0.147
	p-value	0.616	0.997	0.453	0.852	0.864
	Decision to H ₀	Not Rejected	Not Rejected	Not Rejected	Not Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Experiential Instruction	F	0.068	1.023	0.353	4.499	4.682
	p-value	0.946	0.440	0.906	0.014**	0.012**
	Decision to H ₀	Not Rejected	Not Rejected	Not Rejected	Rejected	Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Significant	Significant
Independent Studies	F	-1.608	1.731	3.958	5.102	1.032
	p-value	0.112	0.081	0.002**	0.008**	0.362
	Decision to H ₀	Not Rejected	Not Rejected	Rejected	Rejected	Not Rejected
	Interpretation	Not	Not	Significant	Significant	Not

		Significant	Significant			Significant
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*Values are derived from computed t statistic

**If p-value is ≤ 0.05 , null hypothesis is rejected

The analysis of direct and indirect instruction strategies in table 11 revealed no significant differences in teachers' level of practice based on sex, teaching experience, specialization, or current position. However, employment status did influence the utilization of these strategies, with permanent teachers potentially exhibiting higher proficiency due to increased job security, stability, and access to professional development opportunities (Darling-Hammond and Sykes, 2003; Ingersoll, 2021). Similarly, interactive instruction showed no significant differences across profile variables. In contrast, the use of experiential instruction varied significantly based on employment status and teaching position, suggesting that permanent teachers and those in leadership roles may be more inclined to incorporate experiential learning activities due to their training, philosophical alignment, and greater autonomy in curriculum design (Brown and Smith, 2022; Garcia and Chen, 2023; Kraft and Blazar, 2015). Lastly, the adoption of independent studies as a strategy was not significantly influenced by sex, teaching experience, or teaching position. However, significant differences were observed based on specialization and employment status. Teachers specializing in business and entrepreneurship and those with permanent positions tend to utilize independent studies more frequently, likely due to their training, subject matter relevance, and greater autonomy in instructional design (Ingersoll, 2021; Ronfeldt et. al, 2013; Brown & Hesketh, 2019; Pascarella and Terenzini, 2021).

Table 12. Difference between Teacher's Pedagogical Skills When Grouped According to Profile Variables

Pedagogical Skills		Sex	Years of Experience	Area of Specialization	Employment Status	Position
Classroom Management	F	-1.181	0.672	1.662	3.567	0.672
	p-value	0.241	0.772	0.144	0.033**	0.514
	Decision to H_0	Not Rejected	Not Rejected	Not Rejected	Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Significant	Not Significant
Formative Assessment	F	-0.778	1.059	0.841	2.040	1.378
	p-value	0.439	0.409	0.543	0.137	0.259
	Decision to H_0	Not Rejected	Not Rejected	Not Rejected	Not Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Technology Integration	F	1.084	1.370	0.763	4.396	4.311
	p-value	0.282	0.205	0.601	0.016**	0.017**
	Decision to H_0	Not Rejected	Not Rejected	Not Rejected	Rejected	Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Significant	Significant
Differentiation	F	-0.704	1.174	2.435	3.065	3.359
	p-value	0.484	0.322	0.034**	0.053	0.040**
	Decision to H_0	Not Rejected	Not Rejected	Rejected	Not Rejected	Rejected
	Interpretation	Not Significant	Not Significant	Significant	Not Significant	Significant

*Values are derived from computed t statistic

**If p-value is ≤ 0.05 , null hypothesis is rejected

The results in table 12 found no significant difference in classroom management and formative assessment skills among teachers when grouped by sex, teaching experience, specialization, or teaching position. However, employment status significantly impacted classroom management skills, with permanent teachers potentially exhibiting higher proficiency due to their experience and job stability (Darling-Hammond and Sykes, 2003; Ingersoll, 2021; Fisher and Frey, 2007). Regarding technology integration and differentiation, no significant

differences were observed based on sex, teaching experience, or specialization for the former, and sex, teaching experience, or employment status for the latter. However, employment status and teaching position significantly influenced technology integration skills, while specialization and teaching position impacted differentiation skills. These findings suggest that permanent teachers and those in higher positions may be more proficient in technology integration due to increased access to professional development and resources (Ronfeldt et. al, 2013; Ingersoll, 2021; Ertmer and Ottenbreit-Leftwich, 2010; Goodwin & Highfield, 2020). Similarly, specialization in business and entrepreneurship and higher teaching positions may lead to greater emphasis on differentiated instruction due to subject-specific training, content demands, and accumulated expertise (Wineburg, 2021; Tomlinson, 2020).

Table 13. Relationship between Teacher's Level of Practice among Mentioned Teaching Strategies and Their Extent of Pedagogical Skills

Teaching Strategies		Pedagogical Skills			
		Classroom Management	Formative Assessment	Technology Integration	Differentiation
Direct Instruction	R	0.361	0.347	0.196	0.338
	p-value	0.001**	0.002**	0.092	0.003**
	Decision to H ₀	Rejected	Rejected	Not Rejected	Rejected
	Interpretation	Significant	Significant	Not Significant	Significant
Indirect Instruction	R	0.247	0.314	0.356	0.421
	p-value	0.033**	0.006**	0.002**	0.000**
	Decision to H ₀	Rejected	Rejected	Rejected	Rejected
	Interpretation	Significant	Significant	Significant	Significant
Interactive Instruction	R	0.058	0.113	0.013	0.217
	p-value	0.619	0.333	0.911	0.061
	Decision to H ₀	Not Rejected	Not Rejected	Not Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Not Significant	Not Significant
Experiential Instruction	R	0.153	0.046	0.302	0.164
	p-value	0.190	0.697	0.009**	0.161
	Decision to H ₀	Not Rejected	Not Rejected	Rejected	Not Rejected
	Interpretation	Not Significant	Not Significant	Significant	Not Significant
Independent Studies	R	0.235	0.301	0.361	0.293
	p-value	0.042**	0.009**	0.001**	0.011**
	Decision to H ₀	Rejected	Rejected	Rejected	Rejected
	Interpretation	Significant	Significant	Significant	Significant

**If p-value is ≤ 0.05 , null hypothesis is rejected

For direct instruction, a significant correlation in table 13 exists with classroom management, formative assessment, and differentiation, indicating that teacher's proficient in direct instruction tend to have greater skills in these areas. However, no significant relationship was found between direct instruction and technology integration. This suggests that effective direct instruction can contribute to better classroom management, formative assessment, and differentiation, but may not necessarily involve extensive technology use (Tomlinson, 2020; Tan et. al, 2020). Indirect instruction shows a significant relationship with all pedagogical skills, with a weak linear correlation for classroom management, formative assessment, and technology integration, and a moderate correlation for differentiation. This indicates that proficiency in indirect instruction is associated with stronger pedagogical skills across the board, particularly in differentiation. Effective use of indirect instruction fosters critical thinking and inquiry skills, promoting active learning and differentiated instruction (Ronfeldt et. al, 2013; Fernandez, 2023). Interactive and experiential instruction show no significant correlation with most pedagogical skills, except for a very weak, directly proportional relationship between experiential instruction and technology integration. This suggests that teachers proficient in experiential learning may also tend to integrate technology more effectively into their teaching (Kolb, 2019; Kolb & Kolb, 2005). Finally, independent studies demonstrate a significant, weak, directly proportional relationship with all pedagogical skills. This implies that teachers who

effectively utilize independent studies also tend to have stronger classroom management, formative assessment, technology integration, and differentiation skills. Independent studies foster pedagogical skills related to facilitation, differentiation, assessment, and feedback, and align with student-driven learning goals (Blumenfeld et al., 2019; Wiggins and McTighe, 2005).

5. Conclusion and Recommendations

The study revealed that most business-related subject teachers in the Schools Division of Dinagat Islands are young females with limited teaching experience. While they perceive themselves as highly proficient in various teaching strategies and pedagogical skills, a significant number are teaching outside their specialization, raising concerns about teaching quality. Additionally, the research identified differences in teaching practices based on employment status and teaching position, highlighting potential disparities in access to resources and professional development. While teachers generally demonstrate proficiency in interactive instruction, significant differences were observed in the use of direct, indirect, and experiential instruction, with permanent teachers and those in higher positions exhibiting higher levels of practice. The findings suggest a need for targeted professional development programs to address specialization mismatches and promote effective teaching practices across all teacher demographics.

To enhance the quality of business education in the Schools Division of Dinagat Islands, it is recommended that the school and division human resource and development sections design professional development programs tailored to the specific needs of teachers handling business-related subjects. This should include opportunities for ongoing training and certification in business education to bridge the qualification gap and address out-of-field teaching. The Schools Division Office should also revisit its policies and mandates regarding hiring, merit, and selection to ensure proper alignment between teachers' qualifications and subject assignments. School administrators should regularly review teaching assignments and consider teacher preferences to ensure subject-matter expertise. Furthermore, contextualized mechanisms for continuous feedback and evaluation of teacher performance should be established to identify areas for improvement and inform professional development initiatives. Institutionalizing mentorship programs and professional learning communities can also facilitate knowledge sharing and skill development. Finally, schools should develop subject-specific professional development modules that integrate various teaching strategies with business education content to reinforce specialization and pedagogical alignment.

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