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Research Article

Pedagogical Content Knowledge of Out-Of-Field Junior High School Teachers in the Division of Angeles City Philippines

Renz Camaya*, Elvira Balinas

Angeles University Foundation, Angeles City, 2009, Philippines

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*Corresponding author:

E-mail:

camaya.renz@student.auf.edu.ph

ABSTRACT

This study examined the profile and pedagogical content knowledge (PCK) of out-of-field junior high school (JHS) teachers in the Division of Angeles City, Philippines. With the use of total enumeration, 110 respondents served as respondents. Data gathering was done with the use of Google Form. Through descriptive statistics, data were presented in percentage, frequency, mean, and standard deviation. Results revealed that most respondents were new teachers (21–30 years), holding a Bachelor of Secondary Education major in English. A majority of the respondents don't have graduate studies degrees or units, with only a small number having earned master's or doctoral degrees. The most commonly handled out-of-field subject is Values Education/Edukasyon sa Pagpapakatao. Most participants have one to three years of teaching experience and were primarily designated as Teacher I. It is further indicated that out-of-field JHS teachers demonstrated high levels of pedagogical knowledge, content knowledge, and pedagogical content knowledge. JHS teachers showed particular strength in improving lesson content, connecting lesson topics to enhance meaningful learning, relating lessons to real-life contexts, employing higher-order questioning techniques aligned with DepEd standards, and effectively using their voice during instruction. The results further suggest that despite teaching out-of-field, respondents exhibit a high level of pedagogical content knowledge, highlighting their instructional competence and adaptability in addressing curriculum and learner needs.

Keywords: *Education, Out-of-field Teaching, Pedagogical Content Knowledge*

Introduction

Pedagogical Content Knowledge (PCK) refers to a teacher's understanding of subject

matter and pedagogy, which is important for effective curriculum implementation and successful teaching (Aksu et al., 2014; Doyle &

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Carter, 2003). PCK was introduced by Shulman in the 1980s which addressed the previously neglected issues in the integration of content and teaching strategies, and has since contributed to the professionalization of teaching (Shing et al., 2015; Carlson, 1999 as cited in Shing et al., 2015). To make teaching effective, it requires both strong disciplinary knowledge and alignment between subject matter and pedagogy (Javines & Azarias, 2024). As a unique form of knowledge to teachers, PCK integrates content knowledge with pedagogical strategies (Shulman, 1986).

In recent years, studies emphasize the vital role of PCK in improving instructional quality and student outcomes. Influencing students' academic success and providing a strong theoretical foundation for effective teaching and learning, PCK has been an effective strategy in the teaching and learning process (Aksu et al., 2014; Yang, 2023). PCK has been a critical area for strengthening teacher preparation and professional development, particularly among STEM teachers (Love & Hughes, 2022). This is similar to what Fukaya et al. (2024) where research in elementary mathematics education indicates that rich PCK is associated with better instructional performance, higher student achievement, and stronger teacher motivation and beliefs.

PCK, in a sociocultural perspective, plays an important role in shaping teachers' classroom practices and curriculum decisions, serving as a vital tool for effective pedagogy (Jones & Moreland, 2015). With the existing studies, PCK has been explored across various disciplines and teacher groups, it is also remarkable that research on PCK among out-of-field teachers remains limited, highlighting a clear gap that needs further exploration.

One of the major concerns in the Philippine education system today is the prevalence of out-of-field teaching, where teachers are assigned to teach subjects outside their specialization. The Second Congressional Commission on Education (EDCOM 2) reports that 62% of teachers are teaching out-of-field (EDCOM 2, 2025). For a teacher to be considered out-of-field, they are those who teach subjects not aligned with their college major without appropriate certification (Ingersoll, 1999; Ingersoll,

2019; Bugwak, 2021; Hobbs & Porsch, 2021; Goos et al., 2021; Du Plessis, 2015). Out-of-field teachers often lack advanced subject knowledge, which negatively affects their PCK.

As a global phenomenon, out-of-field teaching is caused by teacher shortages, insufficient training, and limited government support (Lagies, 2021; Moll & Dorn, 2023; Nakar & Du Plessis, 2023). In the Philippines, this concern coincides with low student performance in national and international assessments. National Achievement Test (NAT) results show only partial or average proficiency among students across core subjects (EDCOM 2, 2005), while the Programme for International Student Assessment (PISA) results consistently place the Philippines among the lowest-performing countries in reading, mathematics, science, and creative thinking (San Juan, 2019; Chi, 2023; Chi, 2024).

In spite of the ongoing curriculum reforms made by the Department of Education, including the decongestion of learning competencies and revisions to the senior high school (SHS) curriculum (Department of Education, 2024), the EDCOM 2 emphasized that systemic problems beyond curriculum such as the misalignment between teachers' specialization and teaching assignments, the so-called out-of-field teaching that continues to undermine instructional quality (EDCOM 2, 2025). Highlighting these concerns, this study examines the pedagogical content knowledge of out-of-field JHS teachers to support evidence-based improvements in the pedagogical quality in the Philippine education system.

Objectives of the Study

This study aimed to examine the pedagogical content knowledge of out-of-field public junior high school teachers in Angeles City. Specifically, the study addressed the following objectives:

1. To describe the profiles of out-of-field public JHS teachers in Angeles City in terms of:
 - a. Age
 - b. Educational Qualification
 - c. Major or Field of Specialization
 - d. Out-of-field Subject/s Handled
 - e. Teaching Position
 - f. Years of Teaching an Out-of-field Subject

2. To describe the out-of-field JHS teachers' level of their pedagogical content knowledge.

Methods

This study utilized a descriptive research design and used the Pedagogical Content Knowledge (PCK) Scale adapted from Aksu et al. (2014), to examine the level of PCK of out-of-field JHS teachers in the Division of Angeles City, Province of Pampanga, Philippines. The researchers utilized total enumeration in identifying the respondents, and there were 110 respondents who were identified through the data provided by the Schools Division Office of Angeles City. Eligible participants were public junior high school teachers in Angeles City who had been teaching at least one subject outside their field of specialization for a minimum of one year and who held a *plantilla* position. Out-of-field teachers are defined as those assigned to teach subjects that do not correspond to their field of specialization or college major (Ingersoll, 2019; Bugwak, 2021; Ingersoll, 1999 as cited in Du Plessis, 2015; Goos et al., 2021). Additionally, out-of-field teaching includes situations in which teachers are assigned to grade or year levels for which they do not possess the required certification or formal qualification (Hobbs & Porsch, 2021). Although these teachers graduated with a bachelor's degree, they still lack of advanced content knowledge of the subjects they are assigned to teach due to the absence of specialization.

The PCK Scale of (Aksu et al., 2014) was adapted to describe the overall PCK of public out-of-field JHS teachers in Angeles City. Content validation and internal reliability testing were done to assure the credibility of the scale and its internal consistency. For content validation, four expert validators were consulted. These experts evaluated the revised PCK scale in terms of clarity, relevance, and alignment with the objectives of the study. Having an overall content validity score of 4.44, indicating a high level of validity, the PCK scale passed the required validity score prior to the pilot testing. As a result of the content validation process, the final version of the scale now has 35 items: Pedagogical Knowledge (7 items), Content Knowledge (6 items), and Pedagogical Content

Knowledge (22 items). The PCK scale was pilot tested among 31 out-of-field JHS teachers from seven private schools using an online survey administered through Google Form. Feedback gathered during the pilot testing phase was used to refine the questionnaire instructions. To establish internal reliability, Cronbach's Alpha was computed to assess the instrument's internal consistency. All constructs exceeded the acceptable reliability threshold ($\alpha \geq 0.70$), demonstrating strong reliability: Pedagogical Knowledge ($\alpha = 0.912$), Content Knowledge ($\alpha = 0.893$), and Pedagogical Content Knowledge ($\alpha = 0.982$). The overall reliability of the PCK scale was also found to be reliable and valid, with a Cronbach's Alpha value of $\alpha = 0.985$.

With the use of a Google Form, data were gathered as the consent of the respondents were given. Descriptive statistics were employed to analyze the data, with frequency and percentage used to describe the respondents' profile, and mean and standard deviation used to summarize the PCK scores. A five-point Likert scale was utilized for the PCK instrument, with response options ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Weighted mean scores were interpreted using the following ranges: 1.00–1.49 (Very Low Level of PCK), 1.50–2.49 (Low Level of PCK), 2.50–3.49 (Moderate Level of PCK), 3.50–4.49 (High Level of PCK), and 4.50–5.00 (Very High Level of PCK).

Findings and Discussion

Profile of Out-of-field Junior High School Teachers

Distribution of Out-of-Field Teachers by Age. The age distribution of the out-of-field JHS teachers is predominantly within the bracket of 21-30 years of age with 53 (48.18%) respondents. 31-40 years old or those within their mid-career are represented by 36 (32.73%) among the respondents. 14 (12.73%) of the respondents are within the age bracket of 41-50 years old, while 7 (6.36%) are within the 51-60 years old age bracket. This only indicates that those who are new in the field of teaching are the ones being assigned to out-of-field. As mentioned by Luft et al. (2020), early-career teachers are commonly assigned to out-of-field teaching due to shortage of teachers in a particular specialization. Further, Sheppard et al.

(2020) indicated that those teachers who are assigned to out-of-field teaching during their early years, are the ones who continue it even up to their retirement age. Wyatt and Hobbs (2024) further explained that out-of-field teaching is being experienced by many teachers regardless of their age. This only concludes that out-of-field teaching has been a systemic problem in the country noting that early career teachers and even those who are retiring would retire out-of-field.

Distribution of Out-of-Field Teachers by Bachelor's Degree. The largest number of respondents graduated with a Bachelor of Secondary Education major in English (BSED-English), having 46 teachers (41.82%). This huge number reflects a long-standing trend in Philippine teacher education, where English majors represent one of the largest pools of graduates nationwide (Baras & Gillo, 2024). The oversupply of English majors relative to available English teaching positions often results in their reassignment to other subject areas. Other groups with a high number are those graduates majoring in Filipino and Mathematics, each with 11 teachers (10.00%), followed by Biological Science with 8 (7.27%), Technology and Livelihood Education (TLE) with 6 (5.45%), and Physical Education with 6 (5.45%). Branzuela et al. (2023); Moll and Dorn (2023) indicated that STEM-related and skill-based subjects are considered shortage areas. BSBA-Business Management with 3 (2.73%), AB English Language with 2 (1.82%), AB History with 2 (1.82%), and BSHRM with 1 (0.91%) are non-education programs with lesser number of out-of-field teachers. These degrees, although are not traditionally aligned with basic education teaching, their presence highlights schools' reliance on graduates from related fields when qualified education majors are unavailable (Lopez & Roble, 2022). Highly specialized education programs such as BSED-Biochemistry, BSED-Counseling Education, and BSED-Values Education are each represented by only 1 teacher (0.91%), reflecting the limited production of graduates in these specializations (Paraiso et al., 2024). The results indicate that out-of-field teaching is more prevalent among graduates of widely populated

majors, particularly English, Filipino, and Mathematics.

Distribution of Out-of-Field Teachers by Postgraduate Degree. Most respondents are situated in the early to mid-stages of graduate-level professional development as far as out-of-field JHS teachers' post graduate studies are concerned. Only 8 out of 110 teachers (7.27%) have completed a master's degree, with concentrations in Educational Management/Leadership, English, and Mathematics. This suggests that only a small proportion of out-of-field teachers possess advanced academic preparation that directly supports subject-specific instructional expertise. The prominence of educational management programs further implies that many teachers pursue graduate studies aligned with administrative career pathways rather than discipline-based specialization. Espinosa et al. (2025) stated that a significant number of teachers in the Philippines enroll in leadership-related master's programs rather than programs aligned with their undergraduate majors. 67 teachers (60.91%) have earned master's degree units but have not completed their graduate programs. Licayan and Arroyo (2025) explained that many teachers pursue graduate units primarily for career advancement and promotion, as required by the Department of Education for reclassification. Supporting this observation, EDCOM 2 (2025a) reported that although demand for graduate credentials is high, only 18.77% of master's degree students complete their programs on time. This finding suggests active engagement in professional development among out-of-field teachers, with low completion rates. Notably, the most commonly pursued programs include MAED-Educational Management/Leadership with 25 teachers (22.73%) and MAED-English with 19 teachers (17.27%). In contrast, enrollment remains limited in subject-aligned programs such as Science, Mathematics, Special Education, and MAPEH—areas where out-of-field teaching is frequently reported nationwide. Meanwhile, 35 teachers (31.82%) have not taken any graduate courses, representing a substantial proportion that may face limitations in pedagogical and content mastery, particularly when teaching outside their

specialization. At the doctoral level, only 2 teachers (1.82%) have earned doctoral units, and none have completed a doctoral degree. Collectively, the findings indicate that while many out-of-field teachers demonstrate intent toward professional growth, a significant proportion lack advanced, specialization-aligned training.

Distribution of Out-of-Field Teachers by Major or Field of Specialization. English majors have the largest group with 48 (43.64%). This was highlighted by Lopez and Roble (2022) where they stated that English teachers are commonly out-of-field due to the large pools of English major graduates in the Philippines. Filipino, MAPEH, and Mathematics majors each has 11 teachers (10%), TLE with 10 (9.09%), and both Araling Panlipunan and Science with 9 teachers each (8.18%). These figures indicate that across different disciplines, out-of-field teaching is still existing (Baras & Gillo, 2024). Values Education emerges as the least represented specialization, with only 1 teacher (0.91%), reflecting its limited availability as a standalone undergraduate program nationwide (Paraiso et al., 2024). The presence of out-of-field teachers across different disciplines indicates that the problem stems not solely from teacher shortages but from shortages of teachers with appropriate specialization.

Distribution of Out-of-Field Teachers by Out-of-Field Subjects Handled. Values Education has 88 (67.18%) out-of-field teachers indicating that this subject is the most common area given to the out-of-field teachers. Paraiso et al. (2024) explained that due to the limited number of schools in the Philippines which offer Values Education as a field of specialization, public JHS are forced to transfer non-Values Education majors to teach the said specialization. Filipino with 14 (10.69%), TLE with 7 (5.34%), Science with 6 (4.58%), and MAPEH with 4 (3.05%) indicate that these fields of specialization still lack when it comes to the number of teachers. These skill-based subjects need appropriate skilled teachers to teach them yet still, out-of-field teaching exists within these areas (Flang & Magindra, 2025). Araling Panlipunan with 9 (6.87%), Mathematics with 2

(1.53%), English with 1 (0.76%) reflect smaller numbers of out-of-field teachers. Nevertheless, their presence indicates that even traditionally well-staffed subjects experience occasional deployment mismatches.

Distribution of Out-of-Field Teachers by Teaching Position. 58 respondents (52.73%) were recorded with the teaching position Teacher I, indicating that entry-level teachers are disproportionately assigned out-of-field. These figures show seniority-based scheduling practices (DepEd, 2024; Mejia et al., 2025) as those who are new will commonly be staffed to out-of-field teaching. Teacher III comprised 40 respondents (36.36%), suggesting that out-of-field teaching extends beyond early-career teachers and affects mid-level positions as well. Ingersoll (2019) noted that such patterns often arise from organizational and administrative constraints rather than teacher competence. Teacher II represented 10 respondents (9.09%), while Master Teacher I accounts for only 2 (1.82%), with no Master Teacher II or III assigned out-of-field. In DepEd practices Master Teachers are less likely to be assigned outside their specialization due to their expertise and leadership roles.

Distribution of Out-of-Field Teachers by Years of Teaching Out-of-Field Subjects. 44 teachers (40%) have taught out-of-field for 1–3 years, indicating that many teachers encounter out-of-field assignments early in their careers. However, 29 teachers (26.36%) for 4–6 years, 21 teachers (19.09%) for 7–9 years, and 16 teachers (14.55%) for 10 years or more are also indicated. These findings suggest that out-of-field teaching often becomes a sustained or institutionalized practice rather than a short-term arrangement. The presence of teachers with a decade or more of out-of-field experience reflects long-standing staffing and deployment challenges within the Philippine public school system. Ingersoll et al. (2018) argued that novice teachers are particularly vulnerable to out-of-field placement due to organizational constraints, and that such assignments may persist throughout their careers. These findings underscore the need for more accurate teacher deployment mechanisms, specialization-based hiring practices, and

sustained professional support systems to mitigate the long-term effects of out-of-field teaching on instructional quality and teacher development.

Table 1. Profile of Out-of-Field Junior High School Teachers

Age	f	%
21-30 years old	53	48.18%
31-40 years old	36	32.73%
41-50 years old	14	12.73%
51-60 years old	7	6.36%
Total	110	100%

Bachelor's Degree	f	%
AB English Language	2	1.82%
AB History	2	1.82%
AB Sociology	1	0.91%
BPE - Physical Education	6	5.45%
BSBA - Business Management	3	2.73%
BSED - Biochemistry	1	0.91%
BSED - Biological Science	8	7.27%
BSED - Counseling Education	1	0.91%
BSED - English	46	41.82%
BSED - Filipino	11	10.00%
BSED - Home Economics	2	1.82%
BSED - MAPEH	5	4.55%
BSED - Math	11	10.00%
BSED - Social Studies	3	2.73%
BSED - T.L.E.	6	5.45%
BSED - Values Education	1	0.91%
BSHRM	1	0.91%
Total	110	100%

Master's Degree	f	%
Graduated with Master's Degree	8	7.27%
MAED - Educational Management/Leadership	2	1.82%
MAED - English	3	2.73%
MAED - Mathematics	3	2.73%
With Master's Degree Units	67	60.91%
MA - Guidance and Counseling	1	0.91%
MA English Language and Literature Teaching	3	2.73%
MAED - Educational Management/Leadership	25	22.73%
MAED - English	19	17.27%
MAED - Filipino	5	4.55%
MAED - MAPEH	1	0.91%
MAED - Mathematics	3	2.73%
MAED - Physical Education	4	3.64%
MAED - Religious and Values Education	1	0.91%
MAED - Science	1	0.91%
MAED - Social Studies	1	0.91%
MAED - Special Education	1	0.91%
MAED - TLE	1	0.91%

Master's Degree	f	%
MAED - Values Education	1	0.91%
Without Master's Degree Units	35	31.82%
Total	110	100%

Doctorate	f	%
With Doctorate Degree Units	2	1.82%
EdD - Educational Management	1	0.91%
PhD - Educational Management	1	0.91%
Without Doctorate Degree Units	108	98.18%
Total	110	100%

Major or Specialization	f	%
Araling Panlipunan	9	8.18%
English	48	43.64%
Filipino	11	10.00%
MAPEH	11	10.00%
Mathematics	11	10.00%
Science	9	8.18%
T.L.E.	10	9.09%
Values Education/Edukasyon sa Pagpapakatao	1	0.91%
Total	110	100%

Out-of-Field Subjects Handled	f	%
Araling Panlipunan	9	6.87%
English	1	0.76%
Filipino	14	10.69%
MAPEH	4	3.05%
Mathematics	2	1.53%
Science	6	4.58%
T.L.E.	7	5.34%
Values Education/Edukasyon sa Pagpapakatao	88	67.18%
Total	131	100%

Teaching Position	f	%
Teacher I	58	52.73%
Teacher II	10	9.09%
Teacher III	40	36.36%
Master Teacher I	2	1.82%
Master Teacher II	0	0%
Master Teacher III	0	0%
Total	110	100%

Years of Teaching Out-of-Field Subjects	f	%
1 year to 3 years	44	40.00%
4 to 6 years	29	26.36%
7 to 9 years	21	19.09%
10 years or more	16	14.55%
Total	110	100%

Pedagogical Content Knowledge of Out-of-field Junior High School Teachers

The overall mean score of 4.35 indicates that out-of-field teachers demonstrate a high level of pedagogical content knowledge (PCK). The results indicate that the respondents agreed with the statements that describe their teaching practices in the context of out-of-field teaching. To provide a clearer understanding of this finding, the succeeding discussion examines the three components of PCK: pedagogical knowledge, content knowledge, and pedagogical content knowledge.

Out-of-Field Teachers' Pedagogical Knowledge. With an overall mean of 4.34, the results show a high level of pedagogical knowledge among out-of-field JHS teachers. This indicates that the respondents portray a strong sense of confidence in their ability to plan instruction, manage classrooms, and facilitate effective learning experiences. From the indicators, the highest mean score was reflected in their ability to connect lesson topics to make learning more meaningful ($\bar{x} = 4.59$) which is under very high level category. The result indicates that out-of-field JHS teachers are into helping their students establish connections with the concepts being discussed in their lesson which promotes deeper understanding. High level is also recorded ($\bar{x} = 4.39$) with the ability of the respondents to organize an appropriate learning environment and to prepare lesson plans aligned with Department of Education (DepEd) learning outcomes ($\bar{x} = 4.37$). These results only imply that a strong competence in instructional planning and classroom structuring, suggesting that out-of-field JHS teachers are capable of creating supportive learning environments and designing instruction that follows the curricular standards. Additionally, out-of-field JHS teachers attained high levels of competence in addressing student academic difficulties during lessons ($\bar{x} = 4.34$) and in anticipating lesson components that may pose difficulties among learners ($\bar{x} = 4.30$), which reflect sensitivity to students' needs and the ability to adjust instruction to accommodate learning needs. The ability to identify student misconceptions ($\bar{x} = 4.21$) and to select problems appropriate to the lesson context ($\bar{x} = 4.20$) still fall within the high level

range despite them being lowest among all indicators. These only mean that out-of-field JHS teachers are generally effective in diagnosing learning gaps and choosing suitable instructional activities. Nixon et al. (2017) stated that out-of-field JHS teachers tend to develop competence in classroom management, student engagement, and instructional delivery through experience and continued pedagogical practice.

Out-of-Field Teachers' Content Knowledge. Out-of-field JHS teachers show a high level of content knowledge with an overall mean of 4.30 which indicates a strong understanding of the subject they are teaching. Among the given indicators, out-of-field JHS teachers' ability to improve and enrich lesson content ($\bar{x} = 4.40$) is the highest, indicating their skills to develop instructional materials to enhance student learning. Similarly, notable ratings were also recorded in terms of the respondents' understanding of basic concepts and definitions related to their assigned subjects ($\bar{x} = 4.38$), familiarity with critical lesson points ($\bar{x} = 4.28$), and awareness of DepEd curriculum competencies and standards ($\bar{x} = 4.26$). These competencies are pivotal in keeping the subject content aligned to the curriculum set by DepEd. Additionally, out-of-field JHS teachers also demonstrated self-awareness through their ability to recognize gaps in their own content knowledge ($\bar{x} = 4.24$), a manifestation of openness to professional growth. Understanding underlying theories and principles ($\bar{x} = 4.21$) got the lowest among all indicators, this still reflects a high level of content knowledge. Porsch and Hobbs (2024) reported that out-of-field teachers often enhance their strong subject understanding and command of the concepts through training opportunities and institutional support provided by schools.

Out-of-Field Teachers' Pedagogical Content Knowledge. With regard to the respondents' pedagogical content knowledge (PCK), they have exhibited a high level of PCK with an overall mean of 4.37. This result only suggests that out-of-field JHS teachers possess an ability in integrating subject matter knowledge along with their effective instructional strategies and approaches. From the indicators, the use of questioning techniques that promote higher-order thinking ($\bar{x} = 4.51$), effective use of voice

in the classroom ($\bar{x} = 4.55$), and the ability to relate lessons to real-life contexts ($\bar{x} = 4.62$) got the highest ratings. These results imply that out-of-field JHS teachers are highly effective in engaging students in the discussions, in knowing their authority inside the class, and in relating lessons to real-life situations during classes. High levels of skills were also observed in instructional planning and delivery, including making instructional adjustments based on feedback ($\bar{x} = 4.43$), implementing varied activities to motivate students ($\bar{x} = 4.36$), and organizing lessons in a logical sequence ($\bar{x} = 4.31$). Additionally, respondents demonstrated a strong capability in addressing learner diversity, as reflected in their use of varied teaching strategies aligned with DepEd’s learner-centered framework ($\bar{x} = 4.35$) and consideration of individual learner differences during planning ($\bar{x} = 4.42$). In terms of classroom management and assessment, high ratings were noted in managing instructional challenges ($\bar{x} = 4.36$), effective time management ($\bar{x} = 4.29$), appropriate use of rewards and sanctions ($\bar{x} = 4.37$), and monitoring student performance ($\bar{x} = 4.48$). These results indicate competence and skills in maintaining productive and conducive learning environments and assessing student

progress accurately. Statements and indicators related to lesson presentation, such as using multiple representations of concepts ($\bar{x} = 4.37$), preparing lesson plans that emphasize key points ($\bar{x} = 4.39$), and selecting appropriate teaching methods aligned with learner abilities ($\bar{x} = 4.35$), got high levels of rating. However, with slightly lower mean scores were observed for understanding exemplar concepts ($\bar{x} = 4.00$) and knowledge of instructional programs ($\bar{x} = 4.17$), still fall within the high level category, which suggest an overall competence with opportunities for continued professional development. Taken collectively, the findings indicate that out-of-field teachers possess strong pedagogical content knowledge across all dimensions. This supports the findings of Badaru and Ndlovu (2025), who emphasized that out-of-field teachers are capable of teaching subjects outside their specialization, particularly when supported through collaborative teaching, professional training, peer mentoring, and administrative support. Out-of-field JHS teachers’ consistently high ratings reflect readiness to plan, implement, and manage instruction that aligns with curriculum standards while responding to students’ learning needs.

Table 2. Pedagogical Content Knowledge of Out-of-Field Junior High School Teachers

Pedagogical Knowledge	\bar{x}	SD	Description
1. I can identify students’ misconceptions while teaching new topics.	4.21	0.88	High Level
2. I can prepare appropriate lesson plans in accordance with the intended learning outcomes prescribed by the DepEd curriculum.	4.37	0.90	High Level
3. I can address the difficulties students encounter during my lessons.	4.34	0.83	High Level
4. I can anticipate which parts of my lessons might make students feel pressured or overwhelmed.	4.30	0.88	High Level
5. I can select problems suitable for teaching contexts in my lesson.	4.21	0.88	High Level
6. I can connect topics within the lesson to make learning more meaningful.	4.59	0.80	Very High Level
7. I can organize a suitable learning environment for students.	4.39	0.84	High Level
Mean	4.34		High Level
Content Knowledge	\bar{x}	SD	Description
1. I am familiar with the learning competencies and standards outlined in the DepEd curriculum for the subjects I teach.	4.26	0.94	High Level

Pedagogical Knowledge	\bar{x}	SD	Description
2. I know the critical points of my lessons.	4.28	0.92	High Level
3. I have a clear understanding of the fundamental theories, principles, and key concepts that underpin the lessons I teach.	4.21	0.86	High Level
4. I have a clear understanding of the basic concepts and definitions in the subjects I teach.	4.38	0.82	High Level
5. I have the knowledge of improving the content of my lessons.	4.40	0.84	High Level
6. I can recognize gaps in my own knowledge related to the lessons I teach.	4.24	0.85	High Level
Mean	4.30		High Level
Pedagogical Content Knowledge	\bar{x}	SD	Description
1. I can make necessary corrections in my teaching based on students' feedback.	4.43	0.83	High Level
2. I use questioning techniques that promote higher-order thinking skills as emphasized by DepEd standards.	4.51	0.83	Very High Level
3. I can implement various activities to motivate students at the beginning of lessons.	4.38	0.81	High Level
4. I can organize and present lessons in a logical sequence that helps students understand complex ideas.	4.36	0.90	High Level
5. I use varied teaching strategies that cater to diverse learners in accordance with DepEd's learner-centered framework.	4.35	0.88	High Level
6. I know how to connect the lesson to real-life contexts.	4.62	0.86	Very High Level
7. I prepare lesson plans that highlight the key points of each topic.	4.39	0.86	High Level
8. I can use suitable learning and teaching instruments.	4.25	0.87	High Level
9. I can construct a democratic environment that provides self-expression of students.	4.38	0.87	High Level
10. I can teach concepts using multi-representation as tables, diagrams, and graphic equations.	4.13	0.87	High Level
11. I can manage challenging situations that arise during lessons.	4.36	0.84	High Level
12. I can effectively use awards, punishment and reinforcers.	4.37	0.83	High Level
13. I consider students' individual differences when planning and delivering lessons.	4.42	0.85	High Level
14. I try to understand concepts that exemplify daily life for students in the lesson.	4.40	0.85	High Level
15. I can use time effectively in the lesson.	4.29	0.88	High Level
16. I know how to assess students' performance in the classroom.	4.48	0.81	High Level
17. I can effectively use my voice in the lesson.	4.55	0.85	Very High Level
18. I can identify areas of insufficiency in my teaching and work to overcome them.	4.28	0.86	High Level
19. I have knowledge about learning theories.	4.21	0.86	High Level

Pedagogical Knowledge	\bar{x}	SD	Description
20. I have knowledge about the instructional program.	4.17	0.86	High Level
21. I can control my emotions during lessons.	4.43	0.82	High Level
22. I can select appropriate teaching methods and techniques that align with lesson standards and topics.	4.35	0.83	High Level
Mean	4.37		High Level
Overall Mean	4.35		High Level

Conclusion

The out-of-field junior high school teachers' profile reveals a diverse characteristic as they are grouped in different profile variables. In terms of age, 21-30 years old teachers are dominant among all the respondents. Bachelor of Secondary Education major in English is the most highlighted among the bachelor's degree of the respondents which indicated the highest number of teachers having this major or field of specialization. A majority number of the respondents does not have any master's degree units, hence, only 8 among 110 have finished their master's degree. With regard to doctorate, only 2 among 110 respondents have attained their doctorate. Pertaining to the out-of-field subjects they handle, Values Education/Edukasyon sa Pagpapakatao is the highest in terms of number. Most of the out-of-field junior high school teachers are neophyte, ranging from 1 year to 3 years in teaching that is why most of them are Teacher I in their teaching position.

As regards the out-of-field junior high school teachers' level of pedagogical knowledge, they possess high level in this aspect. It was highlighted that they can connect topics within the lesson to make learning more meaningful. In terms of content knowledge, they recorded high level in this aspect. It was recorded that out-of-field junior high school teachers have the knowledge of improving the content of their lessons. With regard to their pedagogical content knowledge, out-of-field junior high school teachers possess high level in this aspect. It was pointed out that they use questioning techniques that promote higher-order thinking skills as emphasized by DepEd standards, they know how to connect the lesson to real-life contexts, and they can effectively use their voice in the lesson. Out-of-field JHS teachers possess a high level of pedagogical content knowledge.

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