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Competency-based capacity program for secondary taekwondo teacher-coaches: Basis for program enhancement

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ABSTRACT

This study evaluated the effectiveness of a competency-based capacity program for secondary Taekwondo teacher coaches in enhancing learner centered coaching competencies. The study utilized a mixed methods research approach employing a one group pretest posttest design to determine the changes in coaching competency levels before and after the implementation of the training program. The competency domains assessed included Essential Competencies, Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing. Findings revealed that participants initially demonstrated moderate competency levels during the pretest but showed significant improvement in the posttest across all domains. Essential Competencies obtained the highest posttest mean of 4.544, while Personalized Pathways recorded the highest t value of -35.7 with p values lower than .001, indicating statistically significant improvement. The results suggest that the competency-based capacity program effectively strengthened instructional effectiveness, assessment practices, learner centered coaching, and athlete support competencies among secondary Taekwondo teacher coaches.

Keywords: Competency-based education, taekwondo coaching, teacher-coaches, learner centered coaching, coaching competencies.

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INTRODUCTION

Capacity-building plays a crucial role in strengthening the professional abilities of educators and coaches, ensuring they possess the necessary skills and knowledge to deliver effective instruction. In recent years, the Philippine educational system has strengthened its commitment to holistic learner development through the inclusion of sports and martial arts, such as Taekwondo, in school programs. The Department of Education (DepEd), through its School Sports Development Program, has continuously supported teacher-coaches by offering professional training to improve their coaching competencies, instructional delivery, and technical knowledge in preparation for national competitions (Department of Education, 2021). This effort is essential as Taekwondo, a martial art that combines physical skill, discipline, and mental fortitude, has gained significant attention in the school sports curriculum due to its

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numerous benefits in promoting physical fitness, character building, and leadership skills among students.

Despite these efforts, many teacher-coaches in Taekwondo remain inadequately prepared to deliver systematic and competency-based instruction due to various challenges, such as limited access to specialized training and a lack of formal educational background in physical education or martial arts. Thus, there is a growing need for a capacity-building program that can address these gaps and support the professional growth of secondary Taekwondo teacher-coaches.

Likewise, the Palarong Pambansa 2024 Guidelines underscore the promotion of sportsmanship, discipline, and lifelong fitness among learners through equitable participation in school-based sports (Department of Education, 2024). These initiatives align with the United Nations Sustainable Development Goals (SDG 3 and SDG 4), which advocate for quality education and well-being through inclusive and skill-oriented programs (Albert et al., 2023).

The integration of Taekwondo into secondary school sports events reflects the growing emphasis on developing students' physical, mental, and emotional resilience. However, as schools expand their participation in Taekwondo competitions, challenges persist regarding the preparedness and competence of teacher-coaches assigned to handle the sport. This situation highlights the need to explore capacity-building approaches that enhance coaching effectiveness, especially for teachers who are non-Taekwondo practitioners or non-Physical Education majors.

Despite the Department of Education's efforts to strengthen school sports programs, many secondary school Taekwondo teacher-coaches still lack the preparation needed to deliver structured and competency-based instruction effectively. A significant number of teachers assigned as Taekwondo coaches are non-Physical Education majors or have limited martial arts experience, which affects their ability to teach both technical and pedagogical skills while managing athlete training efficiently (Li et al., 2025).

The absence of a clear and standardized framework for building coaching competencies continues to create inconsistencies in teaching approaches and athlete performance across schools. While some professional development initiatives have been introduced, most remain focused on general sports management and fail to address the specific demands of Taekwondo coaching in the secondary education setting (Jia et al., 2024).

Furthermore, many current training programs are short-term and theoretical, offering little opportunity for practical application, feedback, or continuous mentoring (Latino et al., 2024). These conditions highlight the need for a well-defined, evidence-based capacity-building program that focuses on developing the key competencies required for effective Taekwondo instruction.

The continuing lack of structured training and long-term mentorship for secondary Taekwondo teacher-coaches presents not only a challenge but also an opportunity to design a more responsive and sustainable professional learning program. Addressing these gaps provides a pathway for developing a competency-based capacity-building program that accommodates teacher-coaches' different levels of experience, learning styles, and instructional contexts. Such a program can serve as a practical and progressive approach that allows teacher-coaches to strengthen both technical expertise and instructional competence at their own pace while gaining confidence in applying learned skills in real coaching environments (Jia et al., 2024; Li et al., 2025). By using the principles of Competency-Based Education (CBE), the program ensures that learning outcomes are measurable, performance-focused, and directly applicable to actual school sports settings (Latino et al., 2024).

The initiative also supports the Department of Education's goal of improving the quality of school sports programs by empowering teachers to become more competent, confident, and reflective coaches. Hence, this study focuses on developing, implementing, and

evaluating a competency-based capacity-building program for secondary Taekwondo teacher-coaches that will serve as the foundation for a structured coaching module promoting instructional excellence and continuous professional growth.

Statement of the problem

This study was conducted to develop, implement, and evaluate a competency based capacity building program for secondary Taekwondo teacher coaches in the Division of City Schools of Manila.

Specifically, it sought to answer the following questions:

1. What are the pretest and posttest coaching competency levels of secondary Taekwondo teacher coaches in terms of essential competencies, personalized pathways, student agency, meaningful assessment, differentiated support, and responsive pacing?
2. Is there a significant difference between the pretest and posttest coaching competency levels of secondary Taekwondo teacher coaches across the identified domains?
3. What challenges were encountered by secondary Taekwondo teacher coaches during the implementation of the competency based capacity program?
4. What proposed inputs may be drawn from the findings to improve and enhance the competency based capacity program for secondary Taekwondo teacher coaches?

METHODOLOGY

This study utilized a mixed-methods quasi-experimental research design that integrated both quantitative and qualitative approaches to comprehensively develop, implement, and evaluate a competency-based capacity-building program for secondary Taekwondo teacher-coaches. The quantitative phase employed a one-group pretest and posttest design using a Competency Self-Assessment Checklist to evaluate the coaching competency levels of teacher-coaches in terms of Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing before and after the six-week training program. The six-week duration was equivalent to a total of 18 training hours, and the implementation was conducted flexibly depending on the availability of the participating teacher-coaches and trainers to ensure maximum participation and engagement. This tool measured participants' perceived competence across the identified domains of Taekwondo instruction, class management, and feedback provision, reflecting their progress toward mastery of essential coaching skills. The checklist served as the primary instrument for measuring the pre- and post-assessment data in terms of competency levels across the five key areas, while also providing insight into potential challenges perceived by the teacher-coaches during the implementation of the program. Meanwhile, the qualitative phase gathered data through focus group discussions (FGDs) to capture teacher-coaches' insights, learning experiences, perceptions of challenges, and program effectiveness, as well as suggestions for program enhancement. This phase directly addressed the research questions concerning challenges faced by teacher-coaches and inputs and suggestions on how to further improve the program.

Anchored on the Competency-Based Education (CBE) Framework, the research design emphasized the mastery of measurable competencies, self-paced learning, differentiated support, and continuous assessment. The quantitative data from the pre- and post-assessments were analyzed using frequency counts, mean scores, and paired t-tests to determine improvements in perceived skills and mastery levels. The qualitative data from the FGDs underwent thematic analysis to identify recurring patterns related to teacher-coaches' learning

experiences, challenges encountered during the program, application of competencies in actual Taekwondo teaching situations, and perceptions of the feedback and assessment process. This analysis provided rich insights into the challenges faced and gathered suggestions for future enhancements. The integration of quantitative validation and qualitative interpretation ensured a holistic understanding of the program's overall impact, confirming that meaningful learning occurs when mastery is demonstrated through authentic, reflective, and measurable performance.

The development of the capacity-building program and coaching module followed the principles of the Competency-Based Education (CBE) Framework, which emphasized the mastery of essential competencies, personalized learning pathways, and ongoing assessment. The program was designed to enhance the coaching competencies of secondary Taekwondo teacher-coaches in the Division of City Schools of Manila, particularly those who were non-Taekwondo practitioners or non-Physical Education majors. The development process involved identifying the core competencies required for effective Taekwondo coaching, such as instructional techniques, athlete management, safety practices, and feedback delivery, based on literature, policy guidelines, and expert consultation. These competencies formed the structure of the six-week capacity-building module, equivalent to 18 hours of training, which consisted of lectures, skill demonstrations, peer discussions, practical tasks, and reflection activities aligned with CBE concepts. The implementation of the module was conducted flexibly depending on the availability of the participating teacher-coaches and trainers to ensure sustained participation and engagement. Each week focused on a specific competency area, allowing participants to learn progressively and apply what they learned through practice and reflection. The module explicitly addressed core coaching skills, such as the creation of personalized learning pathways, fostering student agency, using meaningful assessments, providing differentiated support, and ensuring responsive pacing throughout the training sessions.

The study involved 30 secondary school teacher-coaches who were purposively selected from different public secondary schools in the Division of City Schools of Manila and other nearby cities. The participants included both Physical Education and non-Physical Education majors, with varying levels of Taekwondo experience, from beginners to more seasoned practitioners. They were actively engaged in coaching students in school-based Taekwondo programs and were willing to participate in the full duration of the competency-based capacity program. This sample size was chosen to provide a diverse yet manageable group, ensuring both comprehensive data collection and effective program implementation. The teacher-coaches participated in both the pre-implementation and post-implementation phases of the study, providing a broad range of experiences and challenges that ensured the program addressed the needs of participants from various backgrounds.

Two researcher-made instruments were utilized in this study to measure the effectiveness of the developed capacity-building module and assess the progression of teacher-coaches' competencies. The Competency Self-Assessment Checklist was used to evaluate teacher-coaches' self-perceived competencies in key areas such as technical instruction, athlete management, and feedback provision. The Interview Guide for the FGD was used to gather in-depth reflections on how the module's content was applied in real-world teaching contexts, offering insights into the practical implementation of learned skills. Together, these instruments provided both quantitative and qualitative data to assess the program's impact on the teacher-coaches' professional growth. All instruments underwent expert validation to ensure content accuracy, alignment with research objectives, and consistency with the CBE framework. The validation process involved specialists in Physical Education, Sports Coaching, Educational Research, and Taekwondo Instruction, ensuring that the instruments were both reliable and relevant to the context of the study. The Competency Self-Assessment Checklist tracked

perceived changes in competencies before and after the training, while the Interview Guide explored how feedback, self-paced learning, and personalized support influenced real-world coaching practices. Through expert validation, these instruments were refined to ensure they effectively captured the impact of the capacity-building program, focusing on mastery-based progression, individualized learning pathways, and the development of essential coaching competencies.

The implementation of the six-week competency-based capacity-building program, equivalent to 18 hours of training, followed a structured process anchored in the Competency-Based Education (CBE) Framework, emphasizing mastery of essential competencies, self-paced learning, and continuous assessment. Prior to the program's start, the researcher conducted an orientation session for the 30 participating secondary Taekwondo teacher-coaches, explaining the study's objectives, procedures, and ethical considerations. This session ensured that participants fully understood the program's structure, their roles, and the ethical standards guiding the research, thereby establishing a clear foundation for the study. The orientation also emphasized the personalized learning pathways and the mastery-based progression model, which were central to the participants' learning experience.

During the pre-implementation phase, participants completed the Competency Self-Assessment Checklist, which served as a baseline measure of their competencies in key areas such as technical instruction, training management, and feedback delivery. This checklist provided a starting point for evaluating each teacher-coach's growth and development throughout the program. The first three weeks focused on developing foundational coaching skills, during which participants attended structured learning sessions, observed live demonstrations, and engaged in practical exercises designed to help them apply newly learned concepts in real-time scenarios. The initial phase emphasized the CBE principle of ongoing assessment, ensuring that each participant received consistent feedback and had the opportunity to adjust their learning strategies. To accommodate the varying availability of the teacher-coaches and trainers, the program's schedule remained flexible, allowing for sustained participation and engagement. Weekly feedback sessions were incorporated to encourage reflection and self-assessment, fostering an atmosphere of continuous improvement. These sessions aligned with the Ongoing Assessment and Feedback principle of the CBE framework, ensuring that each teacher-coach received consistent support and guidance to identify areas for improvement and growth.

Following the first three weeks, the program transitioned into the final three weeks, where the focus shifted toward mastery and the application of learned competencies. During this phase, participants were guided through the planning and simulation of actual Taekwondo training sessions, where they demonstrated their ability to apply the skills and techniques acquired in the program. Every activity and task during this phase was meticulously documented to track each participant's progress, ensuring they met mastery standards before advancing to the next phase. Mastery-based progression was central to this stage, with each teacher-coach required to demonstrate competency in key areas before progressing further. This stage addressed any remaining gaps in technical knowledge, training techniques, and the ability to manage real-world Taekwondo classes effectively. The flexible nature of the schedule and the program's emphasis on individual pacing allowed for differentiated learning, ensuring that all teacher-coaches reached the necessary competency level. By incorporating personalized learning pathways, the program ensured that each teacher-coach's unique learning pace, style, and progress were respected, providing the necessary support and encouragement to help each participant continually improve and successfully master the competencies needed for effective coaching.

After completing the training, the post-implementation phase was conducted to assess the overall effectiveness of the developed module. Participants again completed the Competency Self-Assessment Checklist as a post-test, allowing the researcher to measure any changes in perceived competency levels. The data gathered from the pre- and post-assessments were analyzed using statistical comparisons, which revealed measurable improvements in coaching skills and knowledge. To complement the quantitative data, reflection surveys and structured interviews were conducted to gather qualitative data on participants' experiences, the applicability of the skills learned, and their views on the feedback and assessment processes throughout the program. These qualitative data provided insights into how the competencies were applied in real-world teaching contexts and their perceived effectiveness in enhancing coaching practices. All data collection methods upheld strict ethical standards, ensuring informed consent, confidentiality, and voluntary participation. The data were systematically validated and organized to ensure accuracy and consistency in analysis, providing both measurable and narrative evidence of the program's effectiveness in enhancing the competencies of secondary Taekwondo teacher-coaches.

The study employed both quantitative and qualitative methods of data analysis to evaluate the effectiveness of the developed capacity-building program. Quantitative data were gathered from the Competency Self-Assessment Checklist to assess changes in coaching competency levels across the key areas of Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing, and were processed using the Statistical Package for the Social Sciences (SPSS) software. Descriptive statistics such as frequency, percentage, and mean were used to describe participants' demographic profiles and pre- and post-assessment ratings. To determine if there was a significant improvement in teacher-coaches' perceived competencies after completing the program, a paired sample t-test was conducted at a 0.05 level of significance. This analysis measured the effectiveness of the program in enhancing essential coaching skills, which were central to the Essential Competencies and Mastery-Based Progression principles of the CBE Framework. Graphical representations such as bar charts and tables were used to visualize changes in competency levels, providing an objective measurement of the participants' learning outcomes and the overall success of the developed coaching module.

For qualitative data analysis, responses from the FGD Interview Guide were analyzed using thematic coding. This process involved transcribing all qualitative responses, reading them repeatedly to familiarize with the content, and categorizing key ideas into codes and emerging themes. The themes were aligned with the five major CBE-aligned dimensions reflected in the research questions, namely Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing, as well as themes related to real-world application and feedback-driven improvement. Thematic coding allowed for a deeper understanding of how participants experienced the module, how they applied learned skills in actual coaching situations, and how they perceived the role of assessments and feedback in their skill development. To ensure credibility, recurring themes were validated through member checking and expert review, ensuring that the findings accurately reflected the participants' experiences and perspectives. The integration of statistical results and thematic insights ensured that both the quantitative findings and qualitative narratives complemented each other, providing a holistic evaluation of the program's effectiveness and its relevance to teacher-coach professional development.

The evaluation of the developed capacity-building program and coaching module was conducted to assess its validity, effectiveness, and alignment with the CBE Framework through two primary phases: expert validation and participant evaluation. The expert validation phase involved three professionals from the fields of Physical Education, Sports Coaching, Educational Research, and Taekwondo Instruction. These experts assessed the module using a

researcher-made validation checklist, focusing on the clarity, accuracy, and content relevance of the material, as well as its alignment with the identified competencies outlined in the CBE Framework. Attention was given to ensuring that the module included measurable learning outcomes, supported personalized learning pathways, and integrated authentic performance tasks. Feedback from the experts was systematically analyzed and integrated into the final version of the module to ensure that it was pedagogically sound and contextually appropriate for secondary Taekwondo teacher-coaches. This phase guaranteed that the module aligned with the principles of CBE, particularly in establishing learner-centered pacing, personalized pathways, and meaningful assessments, ultimately affirming the module's validity as an effective instructional tool for enhancing coaching competencies across the dimensions of Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing.

The second phase of evaluation assessed the effectiveness of the module based on the experiences and learning outcomes of the 30 participating teacher-coaches. Quantitative data were collected from the Competency Self-Assessment Checklist at pre- and post-program intervals and analyzed using SPSS, focusing on significant changes in perceived competencies across key areas such as technical instruction, training management, and feedback delivery. The statistical methods, including paired sample t-tests, examined the magnitude of improvement in these competencies, particularly in terms of mastery-based progression as a core principle of the CBE framework. Qualitative data were gathered through focus group discussions and structured interviews and analyzed using thematic analysis to identify patterns related to learning progress, skill application, and feedback utilization during the program. Thematic analysis revealed how teacher-coaches perceived the module's impact on their coaching practices and their ability to apply learned skills in real-world teaching situations, while also highlighting the challenges encountered during the program and providing insight into areas that required further enhancement or refinement. The integration of quantitative and qualitative data offered a holistic evaluation of the module's overall effectiveness, helping identify strengths and areas for improvement, and ensuring that the program not only increased coaching competencies but also aligned with the principles of differentiated support and responsive pacing as intended by the CBE framework. The expert and participant evaluation phases together ensured that the findings were evidence-based and contextually grounded, providing a comprehensive understanding of the module's impact and guaranteeing that the program was learner-centered, competency-driven, and focused on measurable improvements in real-world coaching contexts.

RESULTS AND DISCUSSION

This study involved 30 secondary school teacher-coaches who were purposively selected from public secondary schools in the Division of City Schools of Manila and other nearby cities. Employing a mixed-methods quasi-experimental research design with a one-group pretest and posttest structure, the study developed, implemented, and evaluated a competency-based capacity-building program anchored on the Competency-Based Education (CBE) Framework. Data were gathered using two researcher-made instruments, namely the Competency Self-Assessment Checklist and the Interview Guide for the focus group discussions (FGDs). Quantitative data were analyzed using descriptive statistics, including frequency counts, mean scores, and standard deviations, and inferential statistics using paired sample t-tests conducted at a 0.05 level of significance processed through the Statistical Package for the Social Sciences (SPSS). Qualitative data gathered through FGDs were

analyzed using thematic coding, with recurring themes validated through member checking and expert review. The results presented and discussed in this chapter are interpreted in direct relation to the objectives of the study, which sought to determine the pretest and posttest coaching competency levels of secondary Taekwondo teacher-coaches, examine the significance of the difference between these levels, identify challenges encountered during program implementation, and gather proposed inputs for program enhancement.

Pretest and posttest coaching competency levels of secondary Taekwondo teacher-coaches

The pretest administered on April 30, 2026, revealed that the 30 participating secondary Taekwondo teacher-coaches obtained moderate mean scores across all six competency domains prior to the implementation of the program. Specifically, Essential Competencies obtained a pretest mean of 3.19, Personalized Pathways registered a mean of 3.09, Student Agency yielded a mean of 3.15, Meaningful Assessment recorded a mean of 3.17, Differentiated Support obtained a mean of 3.04, and Responsive Pacing yielded a mean of 3.05. These moderate pretest scores collectively indicate that the teacher-coaches, while possessing a foundational level of awareness across all competency domains, still had areas that required further enhancement prior to the training. The uniformity of moderate ratings across all six domains further suggests that the participants entered the program with relatively similar baseline competency profiles, regardless of their educational backgrounds or levels of Taekwondo experience. This baseline finding underscores the critical need for a structured and competency-aligned capacity-building program that directly addresses the instructional, technical, and pedagogical gaps commonly observed among teacher-coaches who are non-Physical Education majors or non-Taekwondo practitioners.

Following the six-week program equivalent to 18 training hours, the posttest conducted on May 23, 2026, revealed considerably higher mean scores across all six competency domains. Essential Competencies obtained the highest posttest mean of 4.544, followed by Student Agency with a mean of 4.52, Responsive Pacing with a mean of 4.513, Personalized Pathways with a mean of 4.51, Meaningful Assessment with a mean of 4.493, and Differentiated Support with a mean of 4.481. The consistent and substantial increase in mean scores across all competency areas demonstrates that the training program effectively strengthened the participants' knowledge, skills, and learner-centered coaching practices within all identified domains. The fact that Essential Competencies recorded the highest posttest mean suggests that the program was particularly effective in reinforcing the foundational technical and instructional skills necessary for effective Taekwondo coaching, which serves as the bedrock upon which all other competency areas are built. Furthermore, the lower standard deviation values observed in the posttest indicate that the responses of the participants became more consistent after the implementation of the program, reflecting a convergence in competency development and a reduction in variability among participants. This increased consistency implies that the program succeeded in bringing participants from diverse professional and martial arts backgrounds toward a more unified and elevated standard of coaching competence.

These findings align with the Competency-Based Education framework advanced by Wang and Julsuwan (2025), which explains that learners develop stronger skills and knowledge when instruction is focused on demonstrated mastery, authentic performance, and learner-centered experiences. The higher posttest scores across Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing indicate that the competency-based capacity program effectively applied these principles by providing teacher-coaches with structured, practical, and competency-aligned training activities. This is further corroborated by the research of Sabba (2025), which emphasized that continuous

professional development plays a significant role in improving the instructional and coaching competencies of physical education instructors. The substantial increase in the posttest scores of the secondary Taekwondo teacher-coaches suggests that the program helped address gaps in modern coaching strategies, learner engagement, and performance assessment practices, thereby implying that structured and competency-aligned coaching programs can meaningfully strengthen the instructional effectiveness and professional growth of teacher-coaches in sports education. The results also support the study of Estrella (2022), which emphasized that successful coaching in school-based sports requires not only technical expertise but also leadership, planning, adaptability, and interpersonal skills to effectively manage athlete learning and performance. The elevated posttest scores across all domains suggest that the program equipped participants with precisely these competencies, providing structured and competency-aligned preparation that supports teacher-coaches in delivering more organized, effective, and responsive Taekwondo instruction.

Significance of the difference between pretest and posttest coaching competency levels

The paired sample t-test results confirmed a statistically significant difference between the pretest and posttest coaching competency levels of the secondary Taekwondo teacher-coaches across all six domains, with all p values lower than .001, which is well below the 0.05 level of significance. These results lead to the rejection of the null hypothesis for all competency domains, affirming that the improvements observed following the implementation of the competency-based capacity program were not attributable to chance but were the direct result of the training intervention. Among the six domains, Personalized Pathways recorded the highest t value of -35.7, indicating the greatest magnitude of change between the pretest and posttest in this area, which reflects a substantial improvement in the participants' ability to design and implement individualized learning experiences for their athletes. Differentiated Support followed closely with a t value of -35.1, reflecting equally strong gains in the participants' capacity to provide adaptive and responsive coaching practices tailored to the diverse needs of learners. Essential Competencies, Student Agency, Meaningful Assessment, and Responsive Pacing also reflected strong statistically significant increases, as evidenced by their respective high t values and large effect sizes. The large effect sizes recorded across all domains further underscore that the training program produced a very strong and practically meaningful impact on the coaching competencies of the participants, extending beyond mere statistical significance to reflect genuine and substantial professional growth.

The significance of these findings is particularly noteworthy given the diverse professional backgrounds of the participants, which ranged from experienced Physical Education teachers to non-PE majors with minimal martial arts exposure. The uniformity of significant improvement across all domains suggests that the program was sufficiently flexible and responsive to accommodate varying levels of prior experience and competency, while still producing measurable gains for all participants. The large effect sizes observed in Personalized Pathways and Differentiated Support are especially meaningful in this context, as these domains specifically address the capacity to individualize instruction and support learners with different needs, which are competencies that are often underdeveloped among teacher-coaches who lack formal pedagogical training in sports education.

These findings are strongly supported by the Competency-Based Education framework of Wang and Julsuwan (2025), which emphasizes that competency development becomes more effective when learning is centered on mastery, authentic performance, and learner-focused instruction. The substantial and statistically significant increases across all domains indicate

that the training program successfully applied competency-based principles that allowed participants to improve through guided practice, continuous feedback, and performance-based learning experiences. The large effect sizes are consistent with the framework's goal of developing practical and results-driven skills that are directly applicable to real coaching environments. The findings are further corroborated by Chen et al. (2025), who emphasized that competency-based and self-paced instructional models improve learning outcomes by allowing participants to master practical skills according to their individual needs and readiness, a principle that was clearly operationalized in the design and delivery of the six-week capacity-building program. Additionally, the results are consistent with Myers (2024), who found that modular and self-directed learning supported by personalized guidance enhances skill retention, coaching performance, and the practical application of competencies in real-world settings, which aligns directly with the significant posttest improvements observed in the present study.

Challenges encountered during the implementation of the competency-based capacity program

The qualitative data gathered through focus group discussions revealed several challenges encountered by the secondary Taekwondo teacher-coaches during the implementation of the competency-based capacity program, particularly in the application of individualized and learner-centered coaching approaches. With respect to the domain of Personalized Pathways, participants reported difficulties in balancing individualized support with the structural demands of group-based coaching environments. Participant 7 shared that "adapting personalized pathways challenged me to balance individualized support with team structure," while Participant 11 described the difficulty of "adapting the pace and content to fit different skill levels, motivation, and learning needs while keeping everyone progressing consistently." These responses indicate that while the participants understood the value of individualized coaching, translating this principle into actual group training sessions presented practical logistical challenges that required a level of instructional flexibility and classroom management expertise that some participants were still developing.

Challenges related to student agency were equally evident in the qualitative responses. Participant 6 expressed "uncertainty in making independent coaching decisions without external validation," while Participant 12 noted difficulties in "building confidence in making independent coaching decisions, especially during high pressure training situations." These responses suggest that the transition toward a more autonomous and self-directed coaching role was unfamiliar territory for some participants, particularly those with limited prior coaching experience. In terms of assessment practices, Participant 2 found it difficult to "monitor athlete's progress because of the limited time and different learning paces," and Participant 7 emphasized the challenge of "managing the time required for continuous assessment and applying feedback effectively in practice." These observations point to the inherent tension between the demands of ongoing competency-based assessment and the time constraints of school-based sports programs, highlighting the need for more streamlined and practical assessment tools that are manageable within real coaching contexts.

Despite these challenges, several participants also acknowledged the positive outcomes of the program, indicating that the difficulties encountered did not negate the overall effectiveness of the training. Participant 9 stated that the approach "improved communication, confidence, and motivation among the students," while Participant 1 recognized that assessment and feedback helped identify "strengths and areas for improvement." These affirmative responses suggest that even as the teacher-coaches navigated the complexities of applying learner-centered and competency-based approaches, they were simultaneously developing greater reflectiveness, adaptability, and awareness of their athletes' individual

learning needs. The overall thematic pattern that emerged from the FGD responses indicates that although the teacher-coaches encountered challenges related to time management, individualized instruction, independent decision making, and assessment practices, the program nonetheless contributed meaningfully to the development of more reflective, adaptive, and learner-centered coaching practices.

These findings are theoretically grounded in the Competency-Based Education framework of Wang and Julsuwan (2025), which explains that learner-centered instruction requires individualized support, responsive pacing, continuous assessment, and active learner participation to achieve competency mastery. The participants' experiences in balancing athlete needs, managing assessment practices, and making independent coaching decisions reflect the inherent complexities of applying competency-based approaches in authentic coaching environments. The findings are further supported by Rankin et al. (2025), who emphasized that challenges in assessment and feedback often arise when trainers rely heavily on personal judgment and inconsistent evaluation practices, a pattern that was similarly observed among the participants of the present study. The difficulties in monitoring athlete progress, applying feedback, and making independent coaching decisions collectively reinforce the need for clearer assessment systems, reflective practices, and structured coaching support within the program. These challenges also align with the observations of Espoz Lazo et al. (2025), who emphasized that flexible instructional methods, personalized feedback, and real-time learner support are essential for strengthening learner autonomy, skill transfer, and coaching effectiveness in dynamic sports environments, underscoring the importance of further refining these elements in future iterations of the program.

Proposed inputs for the enhancement of the competency-based capacity program

The qualitative data gathered from the focus group discussions also yielded several substantive proposed inputs that may further improve and enhance the competency-based capacity program for secondary Taekwondo teacher-coaches. Across all five CBE-aligned competency dimensions, participants consistently expressed the need for more flexible, differentiated, and practically grounded learning experiences that are responsive to varying levels of experience, coaching background, and athlete needs. With respect to personalized learning pathways, participants highlighted the importance of tiered instructional tracks that accommodate coaches at different stages of competency development. Participant 1 shared that "since I am new in taekwondo, maybe there should be separate activities for beginner coaches first before advanced training," while Participant 12 suggested that "different learning tracks based on experience and athlete needs may improve the program more." Participant 2 further noted that "coaches can adjust the activities based on their own coaching style and athlete needs," and Participant 8 emphasized that "every athlete has different learning styles so maybe more flexible pacing and activities may help especially in large groups." These recommendations collectively reflect an awareness among participants that a uniform training structure may not adequately address the full spectrum of coaching backgrounds represented within the group, and that a more differentiated and adaptive design would yield stronger outcomes.

In relation to student agency, participants recommended the incorporation of more guided practice, structured reflection activities, and scenario-based coaching experiences to strengthen independent decision making and build confidence in real training situations. Participant 6 noted that "reflection tasks and self-set goals may help coaches improve independent decision making," while Participant 12 shared that "scenario-based activities may

help coaches become more flexible and confident during actual coaching situations." These suggestions indicate that participants recognize the value of experiential and reflective learning as pathways toward greater coaching autonomy, and that the program would benefit from more deliberate scaffolding of these experiences throughout the training cycle.

Regarding assessment and feedback practices, participants proposed the development of simpler and more standardized evaluation tools to facilitate consistent and manageable monitoring of athlete progress. Participant 2 explained that "simpler rubrics and clearer standards may help coaches monitor athlete progress easier," while Participant 8 stated that "clear and standard rubrics for every skill may make assessment fairer and more understandable." With respect to continuous feedback and reflective practices, Participant 3 mentioned that "more feedback sessions after activities may help coaches improve their performance," and Participant 6 believed that "regular feedback and self-reflection may help improve coaching adaptation." In terms of differentiated support, participants underscored the need for extended mentoring, continuous monitoring, and access to additional learning resources. Participant 1 shared that "continuous monitoring even outside the sessions may help beginner coaches improve more," and Participant 5 suggested that "more face to face training, seminars, and learning resources may help coaches improve." With respect to responsive pacing, Participant 9 recommended that "different learning tracks, additional practice sessions, and more reflection time may improve coaching application," emphasizing the importance of providing sufficient time and space for participants to internalize and apply what they have learned.

These proposed inputs are theoretically grounded in the Competency-Based Education framework of Wang and Julsuwan (2025), which emphasizes that competency development becomes more effective when learning is personalized, learner-centered, performance-based, and supported through continuous feedback and flexible pacing. The participants' recommendations on separate learning tracks, guided practice, reflective learning, clearer assessment systems, differentiated support, and flexible pacing reflect the framework's central principle that learners achieve stronger mastery when instruction is adapted to their readiness, coaching needs, and real-world contexts. The findings are further supported by Espoz-Lazo et al. (2025), who emphasized that flexible instructional approaches and continuous feedback improve learner autonomy, coaching effectiveness, and skill transfer in sports education, reinforcing the participants' call for more adaptive and responsive program structures. These results are also consistent with Biado (2025), who found that teachers became more effective in handling diverse learner needs when they were provided opportunities to adapt instruction, apply practical strategies, and use contextualized teaching approaches despite limited formal coaching preparation, a finding that directly parallels the experiences and recommendations articulated by the participants of the present study.

Taken together, the findings of this study provide compelling and data-driven evidence that the competency-based capacity program was effective in significantly improving the coaching competency levels of secondary Taekwondo teacher-coaches across all six domains of Essential Competencies, Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing, with all paired sample t-test results yielding p values lower than .001 and large effect sizes across all domains. The pretest mean scores ranging from 3.04 to 3.19 across the six domains and the corresponding posttest mean scores ranging from 4.481 to 4.544 reflect a consistent, substantial, and statistically significant pattern of improvement that demonstrates the practical and theoretical value of competency-based professional development in the context of school-based sports coaching. The qualitative findings further enriched this picture by identifying specific implementation challenges and proposing concrete enhancements that can inform the next iteration of the program. The integration of these quantitative and qualitative findings confirms that a structured, flexible,

and mastery-oriented capacity-building program can effectively bridge the competency gaps of secondary Taekwondo teacher-coaches, particularly those without formal Physical Education specialization or sufficient martial arts background. These results contribute to the growing body of literature on competency-based education and sports coaching professional development, and directly address the need for evidence-based frameworks that support the instructional and coaching preparation of teacher-coaches in the Philippine secondary school sports context. The insights derived from this chapter serve as the foundation for the program enhancement recommendations and conclusions presented in the succeeding chapter of this manuscript.

CONCLUSION

This study was conducted to develop, implement, and evaluate a competency-based capacity-building program for secondary Taekwondo teacher-coaches in the Division of City Schools of Manila, with the overarching aim of enhancing their coaching competencies across six CBE-aligned domains: Essential Competencies, Personalized Pathways, Student Agency, Meaningful Assessment, Differentiated Support, and Responsive Pacing. Using a mixed-methods quasi-experimental research design with a one-group pretest and posttest structure, the study engaged 30 purposively selected secondary school teacher-coaches from public schools in the Division of City Schools of Manila and other nearby cities. The findings of the study, derived from the analysis of quantitative data using paired sample t-tests and descriptive statistics processed through SPSS, and from qualitative data gathered through focus group discussions and analyzed using thematic coding, collectively affirm the effectiveness, relevance, and practical value of the developed program in addressing the identified competency gaps among secondary Taekwondo teacher-coaches.

The pretest results administered on April 30, 2026, established that all 30 participants entered the program with moderate coaching competency levels across all six domains, with mean scores ranging from 3.04 for Differentiated Support to 3.19 for Essential Competencies. These baseline scores indicated that the participants, many of whom were non-Physical Education majors or had limited martial arts experience, possessed only a foundational level of coaching readiness that required further structured development. Following the six-week capacity-building program equivalent to 18 training hours, the posttest conducted on May 23, 2026, revealed substantial and consistent improvement across all domains, with posttest mean scores ranging from 4.481 for Differentiated Support to 4.544 for Essential Competencies. The reduction in standard deviation values between the pretest and posttest further demonstrated that participant responses became more consistent and convergent following the training, reflecting a more unified standard of coaching competence achieved across participants of varying backgrounds and experience levels.

The paired sample t-test results confirmed that the improvements observed between the pretest and posttest were statistically significant across all six competency domains, with all p values lower than .001, well below the 0.05 level of significance. The null hypothesis was therefore rejected for all domains, affirming that the gains in coaching competency were attributable to the training intervention rather than to chance. Personalized Pathways recorded the highest t value of -35.7, followed by Differentiated Support with a t value of -35.1, indicating the greatest magnitudes of change in these domains. Large effect sizes were also recorded across all six domains, providing evidence that the program produced not only statistically significant but also practically meaningful improvements in the coaching competencies of the participants. These results collectively establish that the competency-based

capacity program was highly effective in strengthening the instructional, assessment, and athlete support capabilities of secondary Taekwondo teacher-coaches, particularly in competency areas that are directly relevant to delivering learner-centered, adaptive, and responsive coaching within school-based sports contexts.

The qualitative findings gathered through focus group discussions enriched the quantitative results by surfacing the lived experiences and perspectives of the participants during program implementation. The teacher-coaches reported encountering challenges primarily in the areas of personalizing instruction for athletes with varying skill levels and learning needs, building confidence in making independent coaching decisions, and managing the time demands of continuous assessment and feedback delivery. These challenges reflected the inherent complexities of applying competency-based approaches in real coaching environments and underscored the need for clearer assessment tools, more structured mentoring, and additional opportunities for guided practice within future program iterations. Despite these difficulties, participants also acknowledged meaningful positive outcomes, including improvements in communication, confidence, motivation, and reflective coaching behaviors, which affirm that the program succeeded in fostering more adaptive and learner-centered coaching practices even as implementation challenges persisted.

The proposed inputs gathered from participants provided practical and theoretically grounded directions for program enhancement. Participants recommended the development of tiered learning tracks differentiated by experience level, the incorporation of scenario-based and reflection-driven activities to strengthen student agency and independent decision making, the adoption of simpler and more standardized assessment rubrics to facilitate consistent progress monitoring, and the expansion of mentoring and continuous feedback mechanisms beyond scheduled training sessions. These recommendations align with the core principles of the Competency-Based Education framework advanced by Wang and Julsuwan (2025), which emphasizes that competency mastery is most effectively achieved when instruction is personalized, performance-based, and supported through flexible pacing and ongoing feedback. The convergence of participant recommendations with established theoretical principles reinforces the soundness of the program's CBE foundation and points clearly toward concrete areas of refinement that can strengthen its impact in future implementations.

Taken as a whole, the findings of this study demonstrate that a structured, flexible, and mastery-oriented competency-based capacity-building program can effectively address the professional development needs of secondary Taekwondo teacher-coaches, including those who enter the program without formal Physical Education specialization or sufficient martial arts background. The program provided participants with practical strategies in learner-centered coaching, meaningful assessment, differentiated instruction, and responsive athlete management, equipping them with the competencies necessary to deliver more organized, effective, and contextually appropriate Taekwondo instruction within the Philippine secondary school sports setting. These outcomes directly support the Department of Education's commitment to improving the quality of school sports programs and align with the broader goals of the United Nations Sustainable Development Goals SDG 3 and SDG 4, which advocate for inclusive quality education and the promotion of well-being through skill-oriented programs. The study contributes to the growing body of literature on competency-based professional development in sports education by providing empirical evidence that a well-designed CBE-anchored training program can produce significant, measurable, and practically meaningful improvements in coaching competencies within a relatively short implementation period. Future studies may consider expanding the sample size to include teacher-coaches from a broader geographic scope, extending the program duration to allow for deeper mastery consolidation, and incorporating longitudinal assessment to examine the sustained impact of the program on actual coaching practices and athlete outcomes over time.

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