

Enhancing the competency of Grade 12 TVL learners in Cookery NC II through Project ANGAT (Artistry in Nutrition and Gastronomic Advanced Techniques)

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ABSTRACT

This action research evaluated the effectiveness of Project ANGAT (Artistry in Nutrition and Gastronomic Advanced Techniques) in enhancing the competency and assessment readiness of 172 Grade 12 Technical-Vocational-Livelihood (TVL) learners in Cookery NC II at San Isidro Senior High School. The study addressed a persistent gap between classroom instruction and real-world application, where learners previously struggled with technical precision, time management, and industry standards. Employing a descriptive action research design, the project implemented a structured intervention consisting of enhancement training and mock assessments that replicated actual TESDA National Certification processes. Data were collected through performance-based assessments, direct observations, and recorded assessment results. The findings revealed that 91.86% (158 learners) achieved a "Competent" rating following the intervention. Results indicated high levels of improvement in foundational technical skills such as food preparation, knife skills, and mise en place, while complex tasks like sauce and soup preparation showed moderate improvement. Additionally, the intervention significantly bolstered essential soft skills, including confidence, teamwork, and discipline. The study concludes that Project ANGAT is an effective instructional intervention that bridges the gap between theory and practice by providing authentic, simulation-driven learning experiences. Recommendations include the institutionalization of the project, the provision of targeted remediation for learners not yet competent and increasing the frequency of mock assessments to further strengthen learner readiness for national certification and future employment.

Keywords: Project ANGAT, TVL cookery NC II, competency-based training, mock assessment, action research, technical skills, soft skills.

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INTRODUCTION

The Technical-Vocational-Livelihood (TVL) track under the K to 12 Basic Education Program is designed to equip learners with industry-relevant competencies that prepare them for employment, entrepreneurship, and further technical education. This mandate is anchored on Republic Act No. 10533 or the Enhanced Basic Education Act of 2013, which emphasizes

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the development of holistic learners through a curriculum that is responsive to the needs of industry and aligned with global standards. In support of this, the Department of Education (DepEd) implements competency-based instruction in the TVL track, ensuring that learners acquire not only theoretical knowledge but also practical skills necessary for workplace readiness.

Furthermore, DepEd policies such as DepEd Order No. 8, s. 2015 (Policy Guidelines on Classroom Assessment) highlight the importance of performance-based assessment in evaluating learners' mastery of competencies, particularly in skills-based tracks like TVL. Similarly, DepEd Order No. 31, s. 2012 (Policy Guidelines on the Implementation of Grades 1 to 10 of the K to 12 Basic Education Curriculum) and subsequent issuances reinforce the need for authentic assessment tasks that mirror real-life applications. In the context of TVL-Cookery, this aligns with the standards set by the Technical Education and Skills Development Authority (TESDA) for Cookery NC II, which requires learners to demonstrate competence through actual performance in food preparation, kitchen operations, and adherence to occupational health and safety standards.

Despite these policy supports; a persistent gap exists between classroom instruction and real-world application. Many learners have trouble in transferring learned concepts into actual practice, particularly in cookery where tasks require precision, efficiency, and strict compliance with industry standards. Based on the accomplishment report of Project ANGAT, learners encountered challenges in key competency areas such as time management during food preparation, proper execution of cooking techniques, and adherence to food safety and sanitation protocols. These difficulties indicate a need for more structured and experiential learning opportunities that simulate real assessment and workplace conditions.

In response to these identified gaps, Project ANGAT (Artistry in Nutrition and Gastronomic Advanced Techniques) was conceptualized and implemented as a school-based intervention aligned with DepEd's thrust on improving learning outcomes through contextualized and performance-based strategies. The project provided learners with simulated assessment experiences modeled after TESDA Cookery NC II standards. Through mock assessments and enhancement training, learners were given opportunities to perform authentic tasks such as preparing appetizers, soups, salads, main courses, and desserts under time constraints and evaluation conditions like actual certification processes.

This intervention is also consistent with DepEd Order No. 39, s. 2016 (Adoption of the Basic Education Research Agenda), which encourages the use of action research to address classroom-based problems and improve teaching-learning processes. By integrating experiential learning principles (Kolb, 1984) and competency-based training approaches, Project ANGAT serves as an evidence-based strategy that bridges the gap between theory and practice.

Moreover, the project supports the goals of Sulong EduKalidad, particularly in improving the quality of teaching and learning processes and strengthening learner outcomes. By transforming the school laboratory into a simulated workplace environment, Project ANGAT enhances learners' technical proficiency, work values, and confidence—key attributes necessary for successful national certification and future employment.

In this context, the implementation of Project ANGAT is not only a response to identified learning gaps but also a strategic alignment with national education policies and industry standards. It underscores the importance of authentic, performance-based interventions in ensuring that TVL learners become competent, confident, and globally competitive individuals.

Statement of the problem

This study aimed to evaluate the effectiveness of Project ANGAT in improving learners' competencies in Cookery NC II.

Specifically, it sought to answer the following:

1. What is the competency level of learners after the intervention?
2. What skills (technical and soft skills) were improved?
3. What challenges were encountered during implementation?
4. How effective is Project ANGAT in preparing learners for NC II certification?

METHODOLOGY

This study employed a descriptive action research design to systematically examine the effectiveness of Project ANGAT in improving the competencies of Grade 12 TVL learners in Cookery NC II. Consistent with the Department of Education's thrust on classroom-based research under DepEd Order No. 39, s. 2016 (Basic Education Research Agenda), the design allowed the researchers to implement an intervention, observe its outcomes, and use the findings to enhance teaching learning practices. The descriptive approach was appropriate as it focused on documenting learners' performance, identifying strengths and gaps, and evaluating the impact of the intervention within a real classroom and laboratory context.

The participants of the study were 172 Grade 12 learners enrolled in the Technical Vocational Livelihood (TVL) track, specifically in the Cookery specialization at San Isidro Senior High School. These learners were selected as they were the direct beneficiaries of Project ANGAT and were required to undergo enhancement training and mock assessments in preparation for the TESDA Cookery NC II certification. The participants were grouped into batches to ensure effective facilitation, proper utilization of resources, and closer monitoring of individual performance. The selection of participants was based on total enumeration, wherein all learners enrolled in the Cookery NC II class were included in the study, an approach that ensured comprehensive data collection and allowed for an accurate evaluation of the impact of Project ANGAT on learners' competency levels and skill development. The participants possessed varying levels of prior knowledge and skills in cookery, which provided a diverse basis for assessing the effectiveness of the intervention, and all learners underwent performance-based activities and simulated assessments designed to measure their competencies in areas such as hot meal preparation, cold meal preparation, and the production of sweets and desserts, in accordance with TESDA standards.

Data for the study were collected using multiple sources and methods to ensure validity and reliability, combining performance based, observational, and documentary approaches to evaluate the effectiveness of Project ANGAT in improving the competencies of Grade 12 TVL learners in Cookery NC II. Primarily, performance-based assessments were utilized to measure learners' competency levels, wherein participants were required to perform specific cookery tasks, including hot meal preparation, cold meal preparation, and the production of sweets and desserts, following standards aligned with TESDA, with their outputs evaluated using competency-based criteria to determine whether they met the required standards. In addition, mock assessments were conducted to simulate actual TESDA national certification conditions; these activities provided learners with realistic assessment experiences while allowing the researcher to gather data on their level of preparedness, technical performance, and ability to complete tasks within a given time frame. During these mock assessments, learners' skills in food preparation, time management, and adherence to safety standards were closely monitored

through direct observation, which was employed throughout the implementation of Project ANGAT. The researcher observed learners' performance during hands on activities, focusing on both technical skills, such as knife skills, cooking techniques, and plating, and soft skills, such as teamwork, time management, and discipline, with observational notes used to support and validate the assessment results. Performance assessment results were likewise gathered based on TESDA aligned criteria, classifying learners as Competent or Not Yet Competent, while teacher monitoring reports provided detailed documentation of learners' strengths, weaknesses, and progress throughout the implementation. Immediate feedback during mock assessments was also considered as part of the data, as it reflected real time evaluation and guided learners' improvement in executing various competencies, particularly in hot meal preparation, cold meal preparation, and sweets production. Lastly, recorded assessment results and documentation were analyzed to obtain quantitative data on learners' competency levels, including the number of learners classified as Competent, Not Yet Competent, and those who did not take the assessment. Through these data gathering methods, both quantitative and qualitative information were obtained, ensuring a comprehensive evaluation of the effectiveness of Project ANGAT as an instructional intervention.

The procedure of the study followed a systematic process aligned with the implementation of Project ANGAT. It began with planning and orientation, where project proponents organized the intervention, identified target learners, and conducted orientation sessions for both learners and parents. This was followed by training and preparation, which involved enhancement sessions aimed at strengthening learners' technical knowledge and practical skills in cookery. Subsequently, the mock assessment implementation was conducted, requiring learners to perform actual tasks that covered all required competencies under Cookery NC II, including the preparation of hot meals, cold meals, and desserts under simulated assessment conditions. During this phase, monitoring and evaluation were carried out by teachers who observed performance, provided technical guidance, and documented outcomes. Finally, data analysis was conducted by consolidating assessment results, observations, and feedback to determine the effectiveness of the intervention and identify areas for improvement.

Through this methodology, the study was able to generate evidence-based findings on how structured, performance-based interventions like Project ANGAT can enhance learners' competency, confidence, and readiness for national certification.

RESULTS AND DISCUSSION

The results and discussion presented in this chapter draw on data gathered from 172 Grade 12 Technical Vocational Livelihood learners enrolled in the Cookery NC II specialization at San Isidro Senior High School, selected through total enumeration as respondents of a descriptive action research design implemented under Project ANGAT. Data were obtained through performance-based assessments, mock assessments simulating actual TESDA national certification conditions, direct observation of learners' technical and soft skills, and recorded assessment results and teacher monitoring documentation, and were analyzed using frequency counts and percentage distribution to determine learners' competency levels and the areas of technical and soft skill development achieved through the intervention. The discussion that follows is grounded strictly in the data gathered for the study and is interpreted in direct relation to its objectives, namely to determine the competency level of learners in Cookery NC II, to examine the improvement in learners' technical skills, to describe the development of learners' soft skills, to identify the challenges encountered during implementation, and to evaluate the overall effectiveness of Project ANGAT as a performance based instructional intervention.

With respect to the competency level of learners, the data revealed that out of the 172 learners who participated in the study, 158 learners, or 91.86%, were rated as Competent, 9 learners, or 5.23%, were classified as Not Yet Competent, and 5 learners, or 2.91%, did not take the assessment, for a total of 172 learners representing 100% of the participants. The predominance of learners rated as Competent indicates that the majority successfully demonstrated the required competencies in Cookery NC II, including tasks related to hot meal preparation, cold meal preparation, and the production of sweets and desserts under simulated assessment conditions. This result suggests that Project ANGAT effectively enhanced learners' readiness for national certification by providing authentic opportunities to apply their knowledge and skills in a structured and realistic environment. However, the presence of 9 learners (5.23%) classified as Not Yet Competent and 5 learners (2.91%) who did not take the assessment highlights the need for targeted interventions and continuous support to ensure that all learners achieve the expected standards, indicating that while the intervention was largely successful, a small proportion of learners still require closer monitoring and remediation before they can be considered fully prepared for national certification.

Regarding technical skills improvement, learners demonstrated high improvement in food preparation, described in terms of proper handling and preparation of ingredients, in knife skills, described in terms of accuracy and safety in cutting techniques, in cooking techniques, described in terms of the application of appropriate cooking methods, and in mise en place, described in terms of the organization and preparation of tools and ingredients. Plating and presentation, described in terms of creativity and neatness in food presentation, showed a moderate to high level of improvement, while sauce preparation, described in terms of consistency and texture of sauces, and soup preparation, described in terms of flavor balance and texture, were both rated at a moderate level of improvement. These results indicate that learners showed significant progress in essential areas such as food preparation, knife skills, cooking techniques, plating and presentation, and kitchen organization, improvements that can be attributed to the hands-on nature of the intervention, in which learners performed actual cooking tasks aligned with TESDA standards. Repeated practice, combined with immediate feedback from teachers, enabled learners to refine their techniques and develop consistency. Despite these improvements, some gaps were observed in sauce consistency, soup preparation, and overall technical precision, as some learners produced sauces that were either too thick or too thin, while others struggled with achieving proper texture and flavor balance in soups. This pattern indicates that while foundational skills were strengthened, higher level technical competencies still require further enhancement through focused practice and coaching, suggesting that competency development under Project ANGAT was uneven across skill areas, with more procedural and mechanical tasks mastered more readily than tasks requiring finer sensory judgment.

With respect to the development of soft skills, learners exhibited a high level of development in confidence, indicated by their willingness to perform tasks independently, in teamwork, indicated by cooperation with group members during activities, and in discipline, indicated by their adherence to procedures and maintenance of cleanliness. Time management, indicated by the ability to complete tasks within a given time, and communication, indicated by clear interaction with peers and instructors, both showed a moderate to high level of development, while adaptability, indicated by the ability to adjust to challenges during tasks, showed a moderate level of development. These outcomes indicate that in addition to technical skills, the intervention contributed to the development of essential soft skills, with learners demonstrating increased confidence, improved teamwork and collaboration, better time management, and stronger discipline in following procedures and maintaining cleanliness. This

pattern emphasizes the value of experiential learning in shaping both knowledge and behavior, as the simulated assessment environment encouraged learners to take responsibility, communicate effectively, and adapt to challenges, thereby fostering holistic development that extended beyond purely technical competence.

Despite these generally positive outcomes, several challenges were encountered during implementation. Some learners had trouble managing time efficiently, especially when handling multiple tasks, and there were also inconsistencies in applying cooking techniques, indicating partial mastery of competencies among a subset of learners. Additionally, some learners showed limited proficiency in complex tasks, which affected the quality of their output, and performance anxiety was observed during mock assessments, as learners felt pressured to meet standards within limited time frames. These challenges highlight the need for continuous exposure to assessment like conditions and sustained practice to build both confidence and competence, indicating that the moderate ratings observed in areas such as adaptability, sauce preparation, and soup preparation were linked not only to technical skill gaps but also to the psychological pressure learners experienced under timed, simulated assessment conditions.

Overall, the findings affirm the effectiveness of Project ANGAT as an instructional intervention, with its success attributable to key features such as the simulation of real assessment conditions, the provision of immediate and constructive feedback, and the integration of both technical and soft skills development. By replicating the TESDA assessment environment, learners were better prepared for national certification, and real time feedback allowed them to identify and correct errors promptly, leading to improved performance, while the holistic approach ensured the development of both technical competencies and industry relevant work values. Taken together, the results directly address the objectives of the study by demonstrating that 158 of the 172 participating learners, or 91.86%, achieved a Competent rating, that technical skills such as food preparation, knife skills, cooking techniques, and mise en place reached a high level of improvement while sauce and soup preparation remained at a moderate level, and that soft skills such as confidence, teamwork, and discipline reached a high level of development while time management, communication, and adaptability reached moderate to high or moderate levels, notwithstanding challenges related to time management, technical inconsistency, and performance anxiety. These findings contribute to the growing body of evidence supporting performance based, simulation driven interventions in technical vocational education by illustrating how structured practice combined with immediate feedback can enhance both the technical and behavioral readiness of learners for national certification, and they provide the empirical basis for the conclusions and recommendations presented in the succeeding chapter, particularly with regard to sustaining gains in foundational skills while addressing the remaining gaps in higher level technical competencies and psychological readiness for assessment.

CONCLUSION

Based on the results of the study, it can be concluded that Project ANGAT significantly improved the competencies and assessment readiness of Grade 12 TVL learners in Cookery NC II. The high percentage of learners who achieved competency indicates the effectiveness of simulation-based and performance-driven instructional strategies in technical-vocational education.

The findings reveal that the project successfully bridged the gap between theoretical knowledge and practical application by providing learners with authentic and hands-on learning experiences that closely resemble real-world assessment and workplace conditions.

Through these experiences, learners were able to apply their knowledge, enhance their technical skills, and develop confidence in performing required tasks.

Furthermore, the intervention contributed not only to the improvement of technical competencies but also to the development of essential work values such as discipline, teamwork, responsibility, and time management. These competencies and values are crucial in preparing learners for national certification and future employment in the culinary industry.

Overall, Project ANGAT proved to be an effective instructional intervention that supports holistic learner development and strengthens readiness for both assessment and industry demands.

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