

Development and Evaluation of Self-Learning Activity Sheets For Kindergarten

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Abstract

This study focused on the development and evaluation of self-learning activity sheets for Kindergarten learners for the school year 2025–2026. The study was anchored on the Kindergarten Curriculum Guide and utilized the Input-Process-Output (IPO) model, ADDIE model, and the 5As approach consisting of Activity, Analysis, Abstraction, Application, and Assessment. A developmental research design was employed to ensure that the activity sheets were aligned with the desired learning competencies and appropriate to the developmental needs of young learners. Kindergarten supervisors, early childhood education experts, and professional illustrators participated in the evaluation of the developed instructional materials. An evaluation tool adapted from an existing instrument was used to assess the activity sheets in terms of objectives, content, organization and presentation, clarity of figures and pictures, instructional presentation, and usefulness. Mean was used to determine the overall evaluation of the materials, while the Mann-Whitney U-test was employed to determine whether a significant difference existed between the evaluations of the groups. Results showed that the self-learning activity sheets received an overall rating of Outstanding from both kindergarten supervisors ($M = 4.37$) and professional illustrators ($M = 4.41$). The Mann-Whitney U-test revealed no significant difference between the evaluations of the two groups ($U = 56, p = .218$). The findings indicate that the developed self-learning activity sheets were considered appropriate, relevant, clear, well-organized, visually suitable, and useful for Kindergarten instruction.

Keywords: self-learning activity sheets, Kindergarten, instructional materials, developmental research, ADDIE model, 5As approach

INTRODUCTION

Kindergarten education is a vital stage in a child's development because it establishes the foundation for literacy, numeracy, social interaction, emotional development, and readiness for formal schooling. At this level, learners require instructional materials that are appropriate to their developmental characteristics and learning needs. Although the Department of Education emphasizes developmentally appropriate and play-based learning in the Kindergarten Curriculum, the availability of instructional materials specifically designed for young learners remains a concern. The lack of tailored materials may make it difficult for teachers to address differences in learners' abilities, interests, and learning styles. Thus, there is a need to develop instructional resources that are aligned with the Kindergarten Curriculum Guide and responsive to the developmental needs of young learners.

Self-learning activity sheets provide structured and flexible learning tasks that children may accomplish independently or with minimal assistance from teachers and parents. These materials can be organized

from simple to more complex concepts, allowing kindergarten learners to gradually develop foundational knowledge and skills. However, the preparation of developmentally appropriate activity sheets may be challenging for teachers because of limitations in training, time, resources, and technical support. Consequently, teachers may depend on generic or borrowed materials that do not completely address the needs of kindergarten learners. This situation emphasizes the importance of producing instructional materials that are clear, engaging, visually appropriate, and responsive to the developmental level of young children.

The availability of appropriate learning resources is particularly important because kindergarten learners benefit from materials that encourage active participation, exploration, and meaningful learning experiences. Quality early learning materials should be visually engaging, play-oriented, contextualized, and organized according to the learners' developmental capacities. The study therefore recognized the need for self-learning activity sheets that provide structured learning experiences while allowing children to work independently or with minimal guidance. Such materials may also assist teachers in addressing instructional gaps and providing learning activities that are consistent with prescribed competencies.

In response to these concerns, the present study focused on the development and evaluation of self-learning activity sheets for Kindergarten for Academic Year 2025–2026. The study sought to produce materials that were engaging, developmentally appropriate, and aligned with the K to 12 Kindergarten Curriculum Guide. The development process was guided by the Input–Process–Output (IPO) model and the Analyze–Design–Development–Implementation–Evaluation (ADDIE) framework, while the 5As approach—Activity, Analysis, Abstraction, Application, and Assessment—guided the organization of learning tasks. Through systematic development, expert validation, and evaluation, the study aimed to produce self-learning activity sheets that could serve as relevant instructional resources for kindergarten teachers and learners.

This study focused on the development and evaluation of self-learning activity sheets for kindergarten during Academic Year 2025–2026. It centered on designing instructional materials based on the Desired Learning Competencies contained in the Kindergarten Curriculum Guide. The study considered the development, validation, and evaluation of the activity sheets in terms of their objectives, content, format, language, presentation, and usefulness. The development process was anchored on the Input–Process–Output model, while the ADDIE model served as the primary developmental framework. The 5As approach was also incorporated to provide an organized, interactive, learner-centered, and developmentally appropriate sequence of activities.

The study involved evaluators with relevant expertise in kindergarten education and instructional material development. The respondents consisted of kindergarten supervisors and professional illustrators who assessed the developed self-learning activity sheets. The materials underwent analysis, design, development, implementation, and evaluation. During the evaluation stage, the activity sheets were assessed according to their quality, clarity, developmental appropriateness, organization, presentation, and usefulness. The evaluation results were analyzed using the mean and Mann-Whitney U-test, with the level of significance set at 0.05. The study was limited to the development and evaluation of the self-learning activity sheets and did not extend to a long-term experimental measurement of kindergarten pupils' academic performance.

This study aimed to develop and evaluate self-learning activity sheets for kindergarten for Academic Year 2025–2026. Specifically, it sought to determine the process followed in developing the self-

learning activity sheets, including the analysis of curriculum competencies, design of learning activities, development of instructional content, implementation through expert validation, and evaluation and refinement of the materials. It also sought to determine the evaluation process undertaken by the evaluators in assessing the developed activity sheets in terms of their objectives, content, organization, language, presentation, and usefulness.

Furthermore, the study sought to determine the evaluation results of the self-learning activity sheets as assessed by the evaluators. The evaluation focused on the quality and appropriateness of the materials for kindergarten learners and considered the extent to which the activity sheets were clear, understandable, engaging, developmentally appropriate, and aligned with the learning needs of young children. Finally, the study determined whether there were significant differences in the evaluation results of the self-learning activity sheets between the groups of evaluators, particularly kindergarten supervisors and illustrators.

Methodology

Research Design

The study employed a developmental research design using the Input–Process–Output (IPO) model as the logical flow of the investigation. Since the study concentrated on the development and evaluation of instructional materials, the Analyze–Design–Development–Implementation–Evaluation (ADDIE) model was used as the primary developmental framework. The lessons and activities incorporated in the self-learning activity sheets were structured according to the 5As approach: Activity, Analysis, Abstraction, Application, and Assessment. This framework provided a systematic process for developing instructional materials that were appropriate to the developmental needs of kindergarten learners.

Respondents of the Study

The study involved evaluators who assessed the developed self-learning activity sheets during Academic Year 2025–2026. The respondents consisted of five kindergarten supervisors and two professional illustrators, for a total of seven evaluators. Purposive sampling was used in selecting the respondents because they were chosen based on their expertise and qualifications in kindergarten education, instructional material development, and visual design. The kindergarten supervisors represented 71.43 percent of the evaluators, while the illustrators represented 28.57 percent.

Data Gathering Instrument

The study used a standardized evaluation tool adapted from Mission (2023) to assess the developed self-learning activity sheets. The instrument evaluated the materials in terms of the objectives of the instructional material, content, organization and presentation of the topic, presentation of the instructional material, and usefulness of the instructional material. The evaluation scale ranged from 1.00 to 5.00, with 4.21–5.00 interpreted as Outstanding, 3.41–4.20 as Very Satisfactory, 2.61–3.40 as Satisfactory, 1.81–2.60 as Fair, and 1.00–1.80 as Poor.

The activity sheets themselves were developed through the ADDIE process. During Analysis, the Kindergarten Curriculum Guide and the prescribed competencies were reviewed. During Design, the sequence, format, layout, and learning activities were planned. During Development, the actual instructional content, exercises, illustrations, and guided activities were prepared using the 5As approach. During Implementation, the materials were submitted to selected experts for validation. During

Evaluation, the completed evaluation instruments were consolidated and analyzed to determine the quality and effectiveness of the developed materials.

Data Gathering Procedure

Before the conduct of the evaluation, the researcher developed the self-learning activity sheets based on the Desired Learning Competencies prescribed in the Kindergarten Curriculum Guide. A formal request to conduct the study was secured, together with permission for the selected evaluators to participate in the validation and evaluation of the materials. The developed activity sheets were presented to the evaluators for assessment. Their comments, suggestions, and recommendations concerning content, format, language, presentation, and usefulness were considered in revising and refining the materials. Ethical considerations were observed throughout the study. Participation of the evaluators was voluntary, and they were informed of their right to withdraw without negative consequences. Confidentiality of the information provided by the evaluators was maintained. The gathered evaluation results were properly tallied and processed for statistical analysis, and the results were used as a basis for the final refinement of the self-learning activity sheets.

Statistical Treatment of Data

The mean was used to determine the overall quality and effectiveness of the self-learning activity sheets as evaluated by the respondents. Higher mean values indicated stronger evaluations of the clarity, relevance, developmental appropriateness, and usefulness of the materials. The Mann-Whitney U-test was used to determine whether a significant difference existed between the evaluation results of kindergarten supervisors and professional illustrators. The alpha level was set at 0.05, and statistical computations were processed using the Statistical Package for the Social Sciences (SPSS).

Results

The self-learning activity sheets for Kindergarten were developed in response to the need for age-appropriate, structured, and engaging instructional materials. The development process followed a systematic and learner-centered approach anchored on the Kindergarten Curriculum Guide and its prescribed learning competencies. The IPO model provided the overall conceptual flow, while the ADDIE model guided the analysis, design, development, implementation, and evaluation phases.

During the analysis phase, the curriculum competencies, learning objectives, and priority skills were identified. The design and development phases focused on sequencing topics and activities, preparing child-friendly layouts, and incorporating interactive and play-based activities. The 5As approach was used to organize the learning experiences. During implementation, the developed materials were subjected to expert validation, and the comments and recommendations of the evaluators were incorporated into the revisions. The resulting materials were curriculum-aligned, developmentally appropriate, engaging, and designed to support independent and guided learning.

The evaluation process was conducted after the instructional materials had been revised based on recommendations from the University's Instructional Materials Development Office. The evaluation panel consisted of five kindergarten teachers/supervisors and two professional illustrators. The evaluators examined the objectives, content, organization, language, presentation, and usefulness of the instructional materials. Their feedback was considered in further refining the self-learning activity sheets before their finalization.

The evaluation results showed that the self-learning activity sheets were rated Outstanding by both groups of evaluators. Kindergarten supervisors gave an overall mean of 4.37, while professional illustrators gave an overall mean of 4.41. These results indicate that both groups evaluated the materials positively across the different areas of assessment.

For the objectives of the instructional material, kindergarten supervisors gave a mean of 4.42, while illustrators gave 4.61, both interpreted as Outstanding. The item concerning the relevance of the objectives to the topics of each lesson obtained particularly high ratings, with 4.80 from supervisors and 4.75 from illustrators. The content of the instructional material obtained means of 4.28 from supervisors and 4.37 from illustrators, both Outstanding. Illustrative examples and practice tasks appropriate to the learners' level received high ratings of 4.72 and 4.70, respectively.

For organization and presentation of the topic, supervisors gave a mean of 4.53 and illustrators gave 4.40, both Outstanding. The clarity of figures and pictures received high ratings of 4.78 from supervisors and 4.75 from illustrators. The presentation of the instructional material was also rated Outstanding, with means of 4.27 from supervisors and 4.37 from illustrators. The usefulness of the instructional material received means of 4.38 from supervisors and 4.29 from illustrators, also interpreted as Outstanding.

Although the overall ratings were Outstanding, several individual indicators received Very Satisfactory ratings. These included aspects related to simplifying some content, providing additional examples, organizing some objectives, supporting self-paced learning, and improving the scaffolding of activities. These results indicate that the materials were generally well received while still providing specific areas that could be refined further.

The Mann-Whitney U-test showed that kindergarten supervisors had a mean rank of 15.85, while illustrators had a mean rank of 17.15. The computed U-value was 56, with a p-value of 0.218. Since the p-value was greater than the 0.05 level of significance, there was no statistically significant difference between the evaluations of the two groups.

This result indicates that kindergarten supervisors and professional illustrators provided generally similar assessments of the self-learning activity sheets. Despite having different areas of expertise, both groups evaluated the materials similarly in terms of their objectives, content, organization, presentation, and usefulness. Thus, the evaluation results consistently indicated that the developed self-learning activity sheets were appropriate, well-structured, and acceptable from both educational and visual-design perspectives.

Summary

This study focused on the development and evaluation of self-learning activity sheets for kindergarten for the Academic Year 2025–2026. Using the IPO and ADDIE frameworks, the materials were systematically analyzed, designed, developed, implemented, and evaluated. The 5As approach guided the creation of interactive, age-appropriate, and engaging tasks. Experts and kindergarten teachers assessed the sheets for content, format, presentation, and usefulness, providing feedback that informed revisions. The study produced well-structured, developmentally appropriate self-learning activity sheets that supported independent and guided learning. Data were analyzed using SPSS, with descriptive and inferential statistics applied to interpret results and determine significant differences.

Findings of the Study

In this study, the findings were the following:

1. The development of the Self-Learning Activity Sheets (SLAS) for Kindergarten followed a systematic, theory-based process to create age-appropriate, engaging, and curriculum-aligned materials. Guided by the IPO and ADDIE models, and structured using the 5As approach, the SLAS addressed learners' developmental needs, promoted active participation, and integrated play-based, interactive tasks. Expert validation and teacher feedback ensured the materials' clarity, relevance, and effectiveness, resulting in developmentally appropriate, competency-aligned activity sheets that supported meaningful early childhood learning.
2. The evaluation of the Self-Learning Activity Sheets (SLAS) for Kindergarten involved experts in teaching and visual design who assessed objectives, content, organization, language, and overall presentation. Their feedback was used to refine the materials, ensuring developmental appropriateness, curriculum alignment, and learner engagement. The process confirmed that the SLAS were clear, effective, and academically suitable for young learners.
3. The evaluation of the Self-Learning Activity Sheets (SLAS) for Kindergarten by five Kindergarten teachers and two professional illustrators revealed high effectiveness and developmental appropriateness. Supervisors rated the materials with an overall mean of 4.37 (Outstanding), while illustrators gave a mean of 4.41 (Outstanding). Feedback on objectives, content, organization, language, and presentation guided refinements, ensuring curriculum alignment, learner engagement, and overall academic suitability.
4. The evaluation of the Self-Learning Activity Sheets (SLAS) for Kindergarten showed that supervisors had a mean rank of 15.85, while illustrators had a mean rank of 17.15. The Mann-Whitney U Test yielded a U-value of 56 and a p-value of 0.218, indicating no statistically significant difference between the groups.

Conclusions

Based on the findings, the following conclusions were drawn:

1. The development process of the Self-Learning Activity Sheets (SLAS) for Kindergarten was systematic, research-based, and learner-centered. By following the IPO and ADDIE models and applying the 5As approach, the materials were carefully designed to be age-appropriate, engaging, and aligned with the curriculum. Expert validation and teacher feedback ensured clarity, relevance, and effectiveness, resulting in activity sheets that effectively supported the developmental and learning needs of kindergarten pupils.
2. The evaluation process of the Self-Learning Activity Sheets (SLAS) for Kindergarten was thorough and expert-driven. Feedback from teaching and design specialists ensured that the materials were developmentally appropriate, aligned with the curriculum, and engaging for learners. Consequently, the SLAS were confirmed to be clear, effective, and academically suitable for kindergarten pupils.
3. The evaluation results of the Self-Learning Activity Sheets (SLAS) for Kindergarten indicated that the materials were highly effective, developmentally appropriate, and well-structured. Both supervisors and illustrators rated the sheets as outstanding, confirming that the SLAS met curriculum standards, engaged learners, and were academically suitable for kindergarten pupils.
4. There were no significant differences in the evaluation of the Self-Learning Activity Sheets (SLAS) for Kindergarten between supervisors and illustrators. Both groups consistently assessed the objectives, content, organization, and presentation as effective and developmentally appropriate, confirming the reliability and acceptability of the materials across different expert perspectives.

Recommendation

The following recommendations were based on the foregoing findings and conclusions by the researcher:

1. DepEd officials may use the findings to support the creation and distribution of systematic, research-based, and learner-centered instructional materials for kindergarten. Policies and training programs may be designed to ensure that future materials follow structured frameworks like IPO and ADDIE, which might help promote foundational literacy, numeracy, and holistic child development.
2. Teachers may integrate the Self-Learning Activity Sheets (SLAS) into classroom instruction to deliver engaging, curriculum-aligned lessons. They may use the materials to address diverse learning needs, apply play-based and interactive strategies, and might foster meaningful learning experiences that enhance students' cognitive, social, and creative development.
3. Kindergarten learners may benefit from interactive, child-centered activities that support curiosity, problem-solving, and readiness for formal schooling. They may be encouraged to explore and manipulate materials independently or collaboratively, which might help develop creativity, engagement, and early mastery of literacy and numeracy skills.
4. The researcher may document and share the development and evaluation process as a model for designing instructional materials. This framework may be used in future studies and professional practices in early childhood education, and might promote research-based approaches and evidence-informed material development.
5. Future researchers may build on this study by exploring digital integration, cultural adaptation, or long-term impacts of instructional materials on early learning readiness. They may test variations of the SLAS or develop similar resources for other subjects, which might ensure that the methodology remains systematic, validated, and responsive to developmental needs.

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