

Project SCALE (Scaffolded Chart-Based Approach for Literacy Enhancement) to Empower ALS Students in Correctional Facilities

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Abstract

This action research aimed to improve the English writing skills of Persons Deprived of Liberty (PDL) enrolled in the Alternative Learning System (ALS) at BJMP San Mateo, Rizal, during School Year 2024–2025 through Project SCALE (Scaffolded Chart-Based Approach for Literacy Enhancement). Aligned with Basic Education Research Agenda (BERA), the study bridges Teaching and Learning and Inclusive Education by systematizing delivery through a scaffolded chart system that decodes sentence structures into interactive, visual maps. This innovation supports the QBEDP Strategic Directions of pivoting to quality and expanding access for marginalized learners. The study employed a quantitative quasi-experimental design using a one-group pretest–posttest approach involving all 31 ALS PDL students. Data were collected through validated pre-tests and post-tests aligned with LS1 English communication standards. Mean and percentage determined proficiency levels, while a paired-samples t-test measured significant differences between pretest and posttest scores. Effect size was computed using Cohen's d. Prior the intervention, 100% of the participants did not meet the expected proficiency level. After Project SCALE implementation, the failure rate was eliminated, and 42% achieved "Outstanding" proficiency. Statistical analysis showed a significant improvement in performance, $t(30) = 25.5$, $p < .001$, with a very large effect size ($d = 4.57$), indicating a substantial effect of the intervention. The study concludes that scaffolded, visually structured instructional strategies can effectively enhance literacy among marginalized learners in correctional settings. Project SCALE must be replicated in other correctional ALS centers and supported through teacher training.

Introduction

This study investigated the effectiveness of the Scaffolded Chart-Based Approach to teach English writing skills and support the literacy development of Persons Deprived of Liberty (PDL) Alternative Learning Students (ALS) at the Bureau of Jail Management and Penology (BJMP) in San Mateo, Rizal. This project aimed to address the unique challenges of ALS students inside prisons such as limited schedule for classes and no access to resources. This tailored approach should help promote functional literacy among them. The Project SCALE will aim to enhance the students' writing skills so that they may acquire important literacy skills they will need upon their reintegration in the society.

This study/project is in response to the call of the MATATAG Agenda of DepEd or the DepEd Order No. 014, s. 2023, particularly the component of Making the curriculum relevant to produce job-ready, active, and responsible citizens by equipping the students skills in writing English sentences. Moreover, the DepEd Order No. 16, s.2017 emphasizes the necessity of innovative teaching and learning strategies that is adaptive to the learning

environments of the students, particularly the correctional setting. Most importantly, this project and study aligns with Republic Act No.9155, which calls for a comprehensive education system that includes various modes of teaching that is not accessed through traditional schooling. This is also in support of the DepEd Order No. 4, s.2004 which ensures effective and efficient ALS programs.

This research investigated the effect of Project SCALE (Scaffolded Chart-Based Approach for Literacy Enhancement) activities as a teaching method for the ALS students of BJMP San Mateo, Rizal for the school year 2024-2025. Specifically, answered the following questions:

1. What are the pre-test and post-test scores of the students in Learning Strand I: Communication Skills in English Writing?
2. Is there a significant difference between the level of mastery of the students before and after the implementation of Project Scale?

Project SCALE will be significant to the action planning within the ALS program of San Mateo Suboffice, Division of Rizal. By investigating the effectiveness of this approach in teaching sentence writing among PDLs-ALS, the findings will help develop targeted teaching and learning strategies and resources that can be implemented to other ALS schools and centers in the country. The researcher hopes that the study will contribute to the goals of the ALS program, particularly in meeting the needs of diverse students. The result of this study will also serve as a model for future initiatives aimed at improving the writing skills of students enrolled in inclusive educational systems.

This project/study delivered a meaningful, relevant, and engaging learning experience for ALS students in BJMP San Mateo, Rizal. It contributed to their personal growth and readiness for better reintegration because of their gained writing competency that is aligned with the policies stipulated in the ALS program of the Department of Education.

Methods

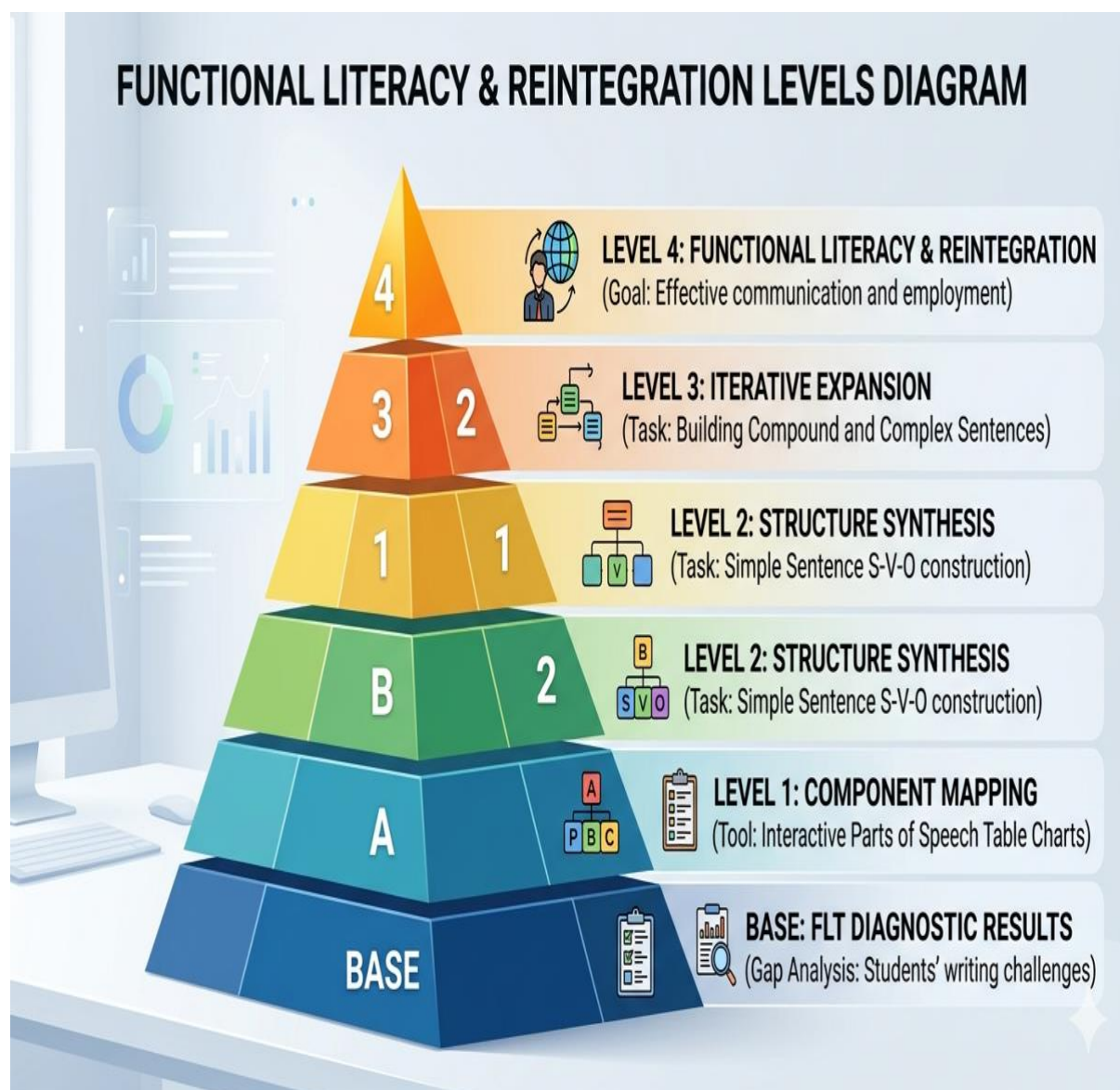
The quantitative quasi-experimental research design was used to investigate the effectiveness of the innovation. It is quasi experimental because the study had only one set of respondents. After the Functional Literacy Test, competencies on writing skills that were not mastered by the students were identified and became the basis of the intervention. Dong et al. (2021) defined this design as type of empirical study used in estimating the causal relationship between an intervention and its outcome. Since it does not involve random assignment of participants to groups, it is not considered full experimental design.

The Innovation

Project SCALE responds to the English writing challenges of the students in ALS BJMP San Mateo. It is an innovative approach that incorporates interactive learning with focus on using scaffolded learning approach through structure table charts to equip the students with understanding of the components of English sentences and improve their writing skills. Primarily, this project addresses the inability of the students to write complete English sentences as reflected by the result of their Functional Literacy Test (FLT). They all struggled with sentence construction, demonstrating a gap in their English writing skills and in their literacy skills at large. This problem poses

a challenge to their effective communication skills and limits their employment as well as their reintegration into society.

Figure 1: Project SCALE Model



The intervention was implemented through a scaffold of interactive activities utilizing table charts. The charts were divided into columns corresponding to different parts of speech, such as nouns, adjectives, and verbs. The students took part actively in filling in the charts, providing examples that relate to each part of speech on a particular row. For example, if a student volunteers 'mother' under the pronoun column, they may choose adjectives about mothers such as beautiful, smart, hardworking etc. in the adjective column, then a relevant verb in the next. This student-centered approach will help them review the different parts of speech and facilitate their understanding of the basic structure of simple sentences. The same approach will be used in studying the structures of the different kinds of sentences as well such as complex, compound, and compound-complex sentences.

Scaffolding upon their knowledge of basic sentences, the students will combine the different parts to form complete sentences. This scaffolding will be iterative as the students' progress to the different types of sentences. As the tasks gradually gets more complex, the students will be able to develop their writing skills more effectively. To make the approach more visually engaging and to promote active learning, this approach will integrate different creative methods such as the use of different colored cardboards and color pens. This project will harness the different potentials of experiential learning while addressing the challenges presented by correctional settings.

Project SCALE is innovative as it integrates different educational strategies to respond to the research problem. The integration of a gradual scaffolding approach, structured chart usage, and interactive individual and group activities informs a comprehensive approach in teaching writing skills for the targeted students. This approach will target both the desired specific learning outcomes and promote collaboration among the students, which is important in the students' community life. The implementation of Project SCALE will empower the ALS students of BJMP San Mateo so that they may overcome their literacy shortcomings as well as get equipped with foundational skills in effective communication for their reintegration into society.

Participants

The respondents of this study are the 31 ALS students at BJMP, San Mateo who participated in English Communication classes that made use of the Project SCALE approach. The students took the pre-test for the targeted competencies to be tested in the study. The researcher then implemented the project SCALE before the administration of the post-test. The project scale was tried on three learning competencies under ALS Learning Strand 1: Communication Skills in English (Writing) namely (1) Use various parts of speech, (2) Write sentences to introduce oneself and the members of the family, and (3) Use various types and kinds of sentences for effective communication of ideas.

Data Gathering

The instrument for the pretest and posttest was drafted by the researcher and was checked for validity and reliability. The material was validated by two Master Teachers in English for grammar and construction, then later validated by two ALS Teachers. The material was pilot tested to regular ALS students who did not participate in the study to check its readability and comprehensibility.

The results of the pretest and posttest were tested using T-test (since the data satisfy the normality assumptions) to check whether the project scale effectively helped the students acquire the competencies (Gopalan et al., 2020).

Results and Discussion

Pretest and Post test Scores

Table 1 shows that there is an improvement in student performance after the intervention. In the pretest, all 31 students (100%) were in the Did Not Meet Expectations (Failed) category, indicating a lack of proficiency.

However, in the post-test, none remained in the failing category, with 13 (42%) achieving Outstanding, 5 (16%) reaching Very Satisfactory, 8 (26%) attaining Satisfactory, and 5 (16%) moving up to Fairly Satisfactory. This result indicates that after the intervention, the students' competency improved and the failure rate was eliminated.

Table 1. Pretest and Posttest Scores of the Respondents

Scores Verbal Interpretation	Pretest (N)	Post-test (N)
Outstanding	0	13
Very Satisfactory	0	5
Satisfactory	0	8
Fairly Satisfactory	0	5
Did Not Meet Expectations (Failed	31	0
Total	31	31

Legend: 0-17 Did not Meet Expectations (failed), 18-21 Fairly Satisfactory, 22-24 Satisfactory, 25-26 Very Satisfactory, 27-30 Outstanding (DepEd Order No. 8, s. 2015)

The findings reveal a significant improvement in student performance following the intervention. Before the intervention, all students were in the Did Not Meet Expectations category, highlighting a lack of proficiency. However, after the intervention, none remained in this category, with a substantial number achieving higher proficiency levels, including Outstanding, Very Satisfactory, Satisfactory, and Fairly Satisfactory. The post-test scores are significantly higher than the pre-test scores, suggesting that the intervention was effective in enhancing student competency and eliminating failure rates. Labarrete and Tiopes (2025) agrees with this finding as they concluded that PDL ALS students take their ALS class as a chance to improve on their English skills, particularly writing skills.

Test of Difference Between the Pretest and Posttest

Table 2: T-Test for Significant Difference in Pretest and Posttest Scores

			statistic	df	p	Lower	Upper	Effect Size
Post test	Pre test	Student's t	25.5	30.0	<.001	13.9	16.3	4.57

Since the pre-test and post-test scores satisfy the normality assumption, t-test was used to statistically treat the data. Table 2 shows the conducted t-test for dependent samples to examine differences in pre and post-test scores of the participants. Results indicated a statistically significant difference, $t(30) = 25.5$, $p < .001$, with a large effect size ($d = 4.57$). Table 3 shows that participants' post-test scores ($M = 25.4$, $SD = 3.49$) were significantly higher than their pre-test scores ($M = 10.3$, $SD = 2.27$). The 95% confidence interval for the difference in scores ranged from 13.9 to 16.3.

Given the success of the intervention, it is recommended that the project be widely adopted and its concept applied to other Alternative Learning System (ALS) subjects to further support student learning. Teachers should integrate the intervention into regular instructional strategies and identify the key components that contributed most to student success.

This intervention will also fit the needs of students in regular program who lack proficiency in writing. It would be best if the researcher will find a way to present and demonstrate how this intervention is done so that more teachers and students will be able to benefit from it.

Future research may examine how the intervention can be optimized for different learning contexts and explore additional instructional strategies that can further enhance student performance and engagement.

For instance, outside the English class, the Component Mapping strategy used in Level 1 has immense potential for cross-curricular application. The same process used to identify parts of speech can be applied to Science or Mathematics to help students visualize the contents of those subjects—such as identifying variables, operators, and procedures. By adopting this design for learning, ALS learning centers can create a cohesive instructional language across all modules, reducing the cognitive load on students who are already balancing the challenges of returning to education.

Ultimately, the intervention looks at the main goal of all educational programs inside correctional facilities- Functional Literacy and Reintegration. The goal is not merely to teach English writing skills, but to provide the communication tools necessary for possible employment and effective social reintegration. When writing proficiency is directly linked to real-world tasks—such as drafting job applications or workplace reports—the intervention becomes a bridge to a more hopeful future. Studies in the future should track these long-term outcomes, measuring how visual literacy training correlates with student confidence and success in the professional world.

Finally, to ensure this project becomes sustainable and reaches its full potential, it is important to develop a Standardized Implementation Guide. This guide should include the currently used FLT Diagnostic tools, the tested SCALE charts, and a decision matrix for ALS teachers to follow. This study can be shared across CALABARZON. This democratization of effective teaching strategies ensures that regardless of a student's background, situation, or even location, they can access a proven, structured path toward functional literacy.

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