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A Data-Driven Training Kit to Enhance the Note Recording Skills of Music Learners

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Abstract

Music note recording is a fundamental skill in music education, yet many undergraduate learners struggle due to the lack of structured, self-guided practice resources. This study aimed to develop and evaluate a data-driven training kit designed to Enhance the Note Recording Skills of Music Learners. A total of 20 first-year students from a Bachelor of Education program in Western Music and Vocal Education were selected through purposive sampling. Research instruments included the training kit, expert evaluation forms, pre- and post-tests, student satisfaction surveys, and behavior observation checklists. Quantitative data were analyzed using mean, standard deviation, and paired sample t-tests. Results showed a statistically significant improvement in students' performance after the intervention ($t = 18.789$, $p < .001$), with a large effect size (Cohen's $d = 2.53$). Experts rated the kit highly ($M = 4.86$, $SD = 0.29$), and students reported very high satisfaction ($M = 4.94$, $SD = 0.14$). These findings support the kit's effectiveness as an engaging and pedagogically sound tool for developing music note recording skills in higher education settings.

Keywords: Music Note Recording, Data-Driven Training Kit, Music Learners

1. Introduction

Music education plays a critical role in supporting students' cognitive, emotional, and social development. Numerous studies have highlighted how engaging in musical activities enhances executive functions, memory, and academic performance, particularly among children and youth [1], [2]. Students involved in long-term music education programs exhibit improved cognitive control and greater participation in learning tasks compared to those with no musical training [3], [4]. Additionally, music education fosters emotional intelligence, social skills, and collaboration through group activities such as ensemble performance or choir participation [5], [6], [7].

In the physical domain, learning music improves motor coordination, especially through instrument playing and rhythmic movement [8]. These benefits are particularly valuable during early developmental stages but remain relevant throughout formal education. Music-based interventions have also been shown to support therapeutic outcomes, reinforcing the importance of well-rounded music training in formal curricula [9].

In Thailand, despite growing recognition of music's educational value, access to effective rhythm and music note recording training materials remains limited. Many students lack the resources or tools needed to develop foundational skills in rhythm comprehension and notation, which are essential for reading, performing, and composing music [10]. The National Education Act emphasizes the importance of lifelong learning and cultural heritage, yet under-resourced schools often struggle to provide students with adequate exposure to diverse musical genres and practical music note recording training [11], [12]. This lack of music note recording -focused instruction affects related cognitive skills, including language development and music note recording comprehension [13], [14].

Traditional lecture-based teaching approaches, which dominate many Thai music classrooms, further limit opportunities for interactive and hands-on learning [15]. Tools such as the Takadimi rhythm system have shown potential, but their adoption is hindered by a shortage of practice materials and contextual resources [16]. Consequently,

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there is a growing need for adaptive, visual, and practical music note recording -training kits that cater to various learner needs and skill levels [17]. These tools should not only teach rhythm and music note recording but also reinforce cultural relevance and foster pride in Thai musical heritage [18].

Recognizing these gaps, this study proposes the development of a data-driven training kit designed to improve music note recording skills among music learners. The kit is built around structured music note recording practice in time signatures such as 2/4, 3/4, and 4/4, and integrates visual aids, progressive exercises, and self-study components. This research seeks to assess the kit's effectiveness in improving students' academic outcomes and satisfaction while promoting more accessible and engaging music instruction in higher education.

2. Literature Review

2.1. The Role of Music Education in Cognitive and Skill Development

Music education plays an important role in enhancing students' cognitive, emotional, and physical development. Research shows that structured music training can improve executive functions, memory, and academic performance in both children and young adults [19], [20]. Students engaged in music programs demonstrate better attention control, problem-solving skills, and academic readiness [21]. These cognitive improvements are also associated with enhanced language development and literacy, especially among learners from disadvantaged backgrounds [22].

Emotional and social growth is also supported through music education. Group-based musical activities, such as ensemble performance and choir singing, help students build emotional regulation, empathy, and collaboration skills [23], [24]. Music creates inclusive environments and promotes positive peer interactions, which are essential for personal development [25]. Physically, learning music contributes to fine motor skill development and hand-eye coordination, especially through instrument playing and rhythmic activities [26]. Music therapy research further supports its benefits in reducing stress and promoting emotional well-being among learners [27].

2.2. Challenges in Music Education in Thailand

In the Thai educational context, several challenges hinder the effective teaching of music. A key issue is the lack of accessible and specialized resources for rhythm and note-recording skill development. Many schools rely on traditional lecture-based approaches, with limited emphasis on practice-oriented learning [28]. Although the National Education Act promotes lifelong learning and cultural heritage, the implementation of these goals in music education is constrained by resource shortages and limited teacher training [29].

Budget constraints and limited infrastructure reduce students' access to diverse music genres and quality rhythm training materials [30]. As a result, many students struggle with fundamental music concepts such as rhythm patterns, note values, and time signatures. These skills are crucial for reading, writing, and performing music effectively [31]. Furthermore, rhythm education has been linked to improvements in language acquisition and reading skills, highlighting its broader impact on academic development [32], [33].

2.3. Note Recording Skill Development and Instructional Tools

Music note recording is a core competency in music education, enabling learners to understand, interpret, and communicate musical ideas. Proficiency in notation supports music theory understanding, aural memory, and performance accuracy. It also facilitates clearer musical communication in collaborative settings such as rehearsals and group performances [34]. However, existing instructional tools for note-recording are often limited in scope. Many available applications focus only on pitch recognition or rhythmic drills, without integrating the full spectrum of notation training [35]. Moreover, these tools often fail to accommodate different learning styles and skill levels, reducing their effectiveness for diverse student groups [36]. Systems like Takadimi have shown promise in rhythm instruction but remain underutilized due to a lack of culturally relevant materials and practice resources [37].

To close these gaps, there is a growing need for comprehensive training kits that combine visual aids, progressive music note recording exercises, and opportunities for independent study. These kits should be adaptable, engaging, and aligned with students' cultural and educational contexts to maximize their learning potential and motivation [38].

3. Methodology

3.1. Research Design

This study employed a quasi-experimental one-group pre-test and post-test design to examine the effectiveness of a data-driven training kit in improving music note recording skills among undergraduate learners. This design was chosen due to practical constraints that limited the feasibility of including a control group, while still allowing for meaningful comparisons of student performance before and after the intervention.

A mixed-methods approach was implemented to enhance the depth and reliability of the findings. Quantitative data were collected from pre- and post-tests as well as student satisfaction surveys. In addition, qualitative data were obtained through expert evaluations and open-ended feedback from participants. The integration of both data types aimed to support triangulation and ensure the internal validity of the study. The full research process, including design, implementation, data collection, and analysis procedures, is outlined in figure 1. This framework presents a clear and structured overview of the methodological flow used in the study.

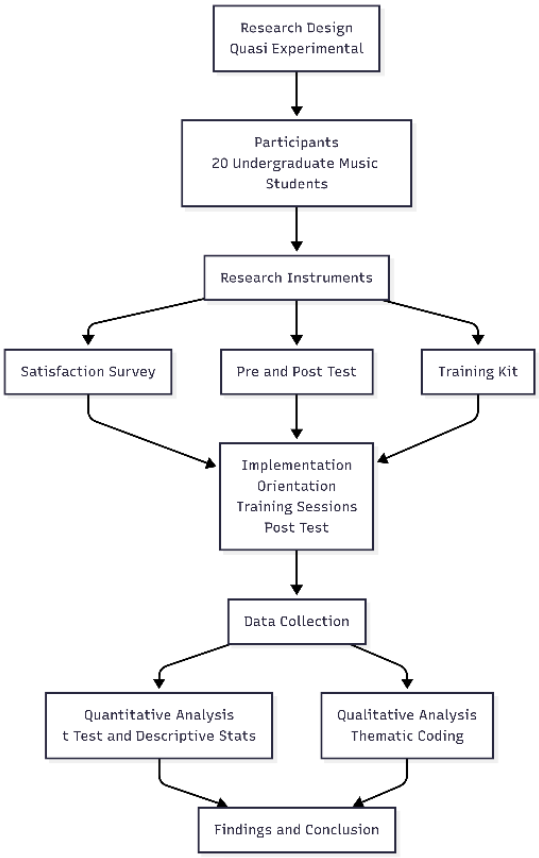

Figure 1. Research Flow

3.2. Participants

The target population consisted of 150 students enrolled in the Bachelor of Education in Western Music and Vocal Education program at Rajamangala University of Technology Thanyaburi. From this population, a purposive sample of 20 first-year undergraduate students was selected. The selection was based on their lack of prior formal instruction in music note transcription, ensuring that all participants began with a similar baseline in the target skill area. To ensure representational diversity across musical disciplines, the sample was drawn proportionally from four instrumental groups: string, percussion, wind, and vocal. Random selection within each group was conducted using a lottery method. All selected participants shared a comparable academic background in fundamental music theory, as confirmed by official academic records. Demographic characteristics of the sample are summarized in table 1.

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Table 1. Participant Demographics by Instrumental Group

Instrument Group	Number of Participants	Percentage (%)
String	5	25%
Percussion	5	25%
Wind	5	25%
Vocal	5	25%
Total	20	100%

This distribution ensured balanced representation across the primary areas of instrumental focus within the program, allowing for broader applicability of the training kit across musical specializations.

3.3. Research Instruments

The primary research instrument in this study was the data-driven training kit, which functioned as the core intervention. The kit was specifically developed to enhance students' music note recording skills through progressive exercises music note recording in 2/4, 3/4, and 4/4. It included a combination of visual learning aids, notational drills, theoretical explanations, guided listening activities, and a supplementary audio CD. The content was structured to support both instructor-led and self-directed learning, allowing flexibility in its implementation.

To measure students' learning outcomes, a pre-test and post-test were developed, each consisting of ten items that assessed students' ability to accurately transcribe rhythmic patterns. The tests were reviewed by three experts in music education to ensure content validity. Internal consistency was confirmed with a Cronbach's alpha coefficient of 0.82, indicating high reliability. The quality of the training kit was evaluated using expert evaluation forms, which were divided into two components: content assessment and media design assessment. Each form applied a 5-point Likert scale to rate elements such as content relevance, clarity, sequencing, visual layout, and instructional appropriateness. Additionally, open-ended sections allowed experts to provide qualitative feedback and suggestions for improvement.

To assess learners' perceptions of the training kit, a student satisfaction survey was employed. This instrument comprised ten Likert-scale items measuring aspects such as ease of use, clarity of content, and perceived usefulness, along with three open-ended prompts for collecting narrative feedback. The content validity of the survey was established using the Index of Item-Objective Congruence (IOC), calculated as:

$$\text{IOC} = \frac{\sum X_i}{N} \tag{1}$$

X_i represents the expert's rating of each item (-1 = not congruent, 0 = uncertain, +1 = congruent), and NNN is the total number of experts. Items with IOC values greater than 0.67 were retained for final use. In addition, a behavioral observation checklist was used throughout the training sessions to document indicators of student engagement, such as attentiveness, participation, and response to feedback. To evaluate students' performance in applying notation skills, a performance rubric was developed. This rubric measured notation accuracy, rhythmic fluency, and adherence to formal music notation conventions. Inter-rater reliability was tested using Cohen's Kappa, yielding a coefficient of 0.91, which indicates a high level of agreement between raters. Together, these instruments provided a comprehensive and multi-dimensional assessment framework, ensuring that both the learning process and outcomes were measured accurately and reliably.

3.4. Procedure

At the outset of the study, all participants were briefed on the research objectives, procedures, and their rights as research subjects. Informed consent was obtained in accordance with institutional ethical standards. To establish a baseline of music note recording skills, a pre-test was administered before any instructional intervention. Participants were then introduced to the data-driven training kit, including detailed usage instructions and access to all learning materials, such as music note recording guides, audio resources, and notation worksheets. The intervention was implemented over a six-week period, with one two-hour session per week, conducted in a controlled classroom environment.

Each weekly session adhered to a consistent instructional structure, consisting of four core components: (1) theoretical input, (2) guided practice using the training kit, (3) formative feedback and discussion, and (4) assignment of independent practice tasks. The instructional content followed a progressive sequence of rhythmic complexity, starting with music note recording in 2/4 time, followed by 3/4, and concluding with 4/4.

Between sessions, students were expected to complete weekly exercises at home using the provided materials, including audio playback from the accompanying CD for reinforcement. Student progress was monitored both through in-class observations and collection of weekly assignments. In the final week, a post-test was administered to assess learning gains. Additionally, students completed a satisfaction survey, and instructors completed an observation checklist based on student engagement and performance throughout the intervention. Final performance tasks were evaluated using the achievement rubric, which assessed notation accuracy, rhythmic precision, and fluency.

3.5. Data Analysis

The quantitative data collected in this study were analyzed using SPSS version 26. Descriptive statistics were applied to summarize data from expert evaluations, student satisfaction scores, and achievement test performance. These included means $\bar{X}$ and Standard Deviations (SD) for all Likert-scale and test score responses. To evaluate the effectiveness of the training kit, inferential analysis was conducted using a paired samples t-test, comparing pre-test and post-test results. The t-value was calculated using the following formula:

$$t = \frac{\bar{X}}{\frac{S_d}{\sqrt{n}}} \tag{2}$$

$\bar{X}$ is the mean of the difference scores (post-test minus pre-test), S_d is the standard deviation of the difference scores, n is the number of participants. A significance level of α=0.05\alpha = 0.05α=0.05 was used as the threshold for hypothesis testing. The effect size of the intervention was measured using Cohen's d, providing a standardized estimate of the magnitude of improvement. The formula used is:

$$d = \frac{\bar{X}_{\text{post}} - \bar{X}_{\text{pre}}}{S_p} \tag{3}$$

$\bar{X}_{\text{post}}$ and $\bar{X}_{\text{pre}}$ are the mean scores for post-test and pre-test respectively, S_p is the pooled standard deviation, calculated from both test phases. The internal consistency of the student satisfaction survey was evaluated using Cronbach's alpha. The resulting coefficient indicated strong reliability across the instrument items. In addition to quantitative analysis, qualitative data from open-ended survey responses were examined using thematic coding. Recurring themes were identified to capture students' perceptions of the training kit's usability, their learning motivation, and the perceived educational benefits. These qualitative insights were used to support and contextualize the quantitative findings.

4. Results and Discussion

4.1. Improvement in Music Note Recording Skills

To evaluate the effectiveness of the training kit, a paired samples t-test was conducted to compare students' performance in music note recording before and after the intervention. The statistical results demonstrated a significant improvement, indicating that the training kit had a meaningful impact on students' music note recording transcription skills. As presented in table 2, the mean pre-test score was 5.20 with a standard deviation of 1.14. This suggests that, prior to the intervention, students demonstrated only a moderate level of proficiency in rhythmic notation, with some variability in ability across the sample.

Table 2. Comparison of Pre-Test and Post-Test Scores (n = 20)

Test Phase	Mean (M)	Standard Deviation (SD)	t-value	p-value	Cohen's d
Pre-Test	5.20	1.14			
Post-Test	8.75	0.91	18.79	< 0.001	2.53

Following six weeks of structured training using the data-driven kit, the mean post-test score rose substantially to 8.75, with a reduced standard deviation of 0.91. The decrease in standard deviation suggests that not only did students improve overall, but their performances also became more consistent, indicating that the kit effectively supported both higher- and lower-performing students in reaching a more uniform level of competence. The calculated t-value of 18.79 and a p-value of less than 0.001 confirm that the improvement in scores is highly statistically significant, far exceeding the conventional threshold for significance at the 0.05 level.

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Furthermore, the effect size, measured by Cohen's d, was 2.53. This is considered an exceptionally large effect, as values above 0.8 are typically regarded as large in educational research. An effect size of this magnitude provides compelling evidence that the training kit was not only statistically effective but also practically impactful in educational terms. Students showed considerable gains in their ability to identify, understand, and accurately transcribe music note recording in 2/4-, 3/4- and 4/4-time signatures, which were the focus of the intervention.

The findings suggest that the design of the training kit—particularly its use of progressive difficulty, multimodal resources (including visual and auditory input), and opportunities for independent practice—played a critical role in improving students' musical notation skills. The substantial gains observed indicate that the instructional approach employed in this study may serve as a valuable model for music note recording -focused music education at the undergraduate level.

4.2. Expert Evaluation of the Training Kit

To ensure the instructional quality and technical soundness of the training kit, three experts in the fields of music education and instructional media evaluated its components using a standardized rubric. The evaluation instrument consisted of five key dimensions: content accuracy, instructional clarity, visual design and layout, integration of audio materials, and cultural relevance. Each dimension was rated on a 5-point Likert scale, where 1 indicated very poor quality and 5 indicated excellent quality. The results of the expert evaluations are summarized in table 3.

Table 3. Expert Evaluation Scores of the Training Kit (n = 6)

Evaluation Criteria	Mean (M)	SD
Content Accuracy	4.90	0.10
Instructional Clarity	4.83	0.15
Visual Design and Layout	4.87	0.12
Integration of Audio Materials	4.83	0.21
Cultural Relevance	4.87	0.17
Overall Average	4.86	0.29

The results indicate a consistently high level of expert approval across all evaluation criteria. Content accuracy received the highest average score of 4.90, reflecting strong alignment with theoretical and practical standards in music education. Instructional clarity and integration of audio materials both received a score of 4.83, suggesting that the material was presented in a manner that was pedagogically effective and appropriately supported by audio examples. The visual design and layout scored 4.87, indicating that the aesthetic presentation and structure of the kit were not only functional but also engaging for learners.

Additionally, the dimension of cultural relevance scored 4.87, highlighting that the training kit was considered appropriate and meaningful within the Thai educational and musical context. The overall mean score of 4.86, with a standard deviation of 0.29, reflects both a high level of quality and strong agreement among the experts. The relatively low standard deviations across all dimensions suggest consistent evaluations and minimal disagreement among raters. Taken together, these results confirm that the training kit met essential standards of instructional design, content validity, and cultural appropriateness, making it a robust and reliable tool for teaching music note recording in undergraduate music education.

4.3. Student Satisfaction Analysis

To evaluate students' perceptions of the training kit, a 10-item Likert scale survey was administered at the end of the intervention. The survey measured various dimensions of satisfaction, including usability, instructional clarity, engagement, cultural appropriateness, and overall usefulness. Responses were rated on a 5-point scale, where 1 indicated "very dissatisfied" and 5 indicated "very satisfied." The results are presented in table 4.

Table 4. Student Satisfaction Ratings (n = 20)

Survey Domain	Mean (M)	SD
Ease of Use	4.95	0.11
Clarity of Instruction	4.90	0.13
Engagement and Motivation	4.98	0.08

Usefulness for Practice	4.96	0.09
Visual and Audio Integration	4.93	0.10
Cultural Appropriateness	4.95	0.07
Encouragement of Self-Study	4.94	0.12
Overall Satisfaction	4.94	0.14

The results indicate a very high level of student satisfaction across all survey domains. The highest-rated item was Engagement and Motivation, with a mean score of 4.98 and a very low standard deviation of 0.08, suggesting near-unanimous agreement that the training kit was engaging and encouraged active participation. Usefulness for Practice and Ease of Use followed closely with mean scores of 4.96 and 4.95, respectively, highlighting the kit's practical value and user-friendly design.

Clarity of Instruction received a mean of 4.90, indicating that students found the explanations and directions within the kit to be generally clear and easy to follow. Meanwhile, Visual and Audio Integration and Cultural Appropriateness also scored highly, with means of 4.93 and 4.95, reflecting positive student responses to the kit's multimedia components and its relevance to the Thai educational context.

The domain Encouragement of Self-Study received a mean score of 4.94, showing that students felt the kit supported independent learning beyond classroom instruction. The overall satisfaction score of 4.94 (SD = 0.14) further confirms that the majority of students had a consistently positive experience with the training kit. In open-ended responses, students commented that the materials were well-structured and that the combination of guided exercises and audio playback helped them practice more confidently at home. Several noted that the gradual progression of difficulty allowed them to stay motivated and experience a clear sense of improvement week by week.

These findings suggest that the training kit was not only instructionally effective, as indicated by test score improvements, but also highly acceptable and motivating from the learner's perspective. High satisfaction across multiple domains reinforces the kit's practicality, accessibility, and pedagogical value within undergraduate music education settings.

4.4. Observed Learning Behaviors and Performance

Throughout the six-week intervention, students' learning behaviors were systematically monitored using a structured observation checklist. This instrument was employed during each training session to capture real-time indicators of engagement, self-regulation, and collaboration. Observational data were then summarized to provide a comprehensive overview of behavioral trends exhibited by students during the learning process. Key behavioral patterns are presented in table 5.

Table 5. Summary of Observed Learning Behaviors

Behavior Indicator	Frequency Observed (Avg)	Interpretation
Active Participation	High (19/20 students)	Highly Engaged
Completion of Homework	High	Good Independent Learning
Engagement with Audio Material	Moderate to High	Mixed Home Practice Habits
Peer Collaboration	High	Strong Social Interaction
Willingness to Self-Correct	High	High Metacognitive Awareness

As shown in the table, active participation was consistently high, with 19 out of 20 students regularly contributing to in-class activities. This level of engagement suggests that the training kit effectively captured students' attention and maintained their interest throughout the program. Homework completion was also observed at a high rate, indicating strong commitment to independent learning tasks and suggesting that the structure and clarity of the kit facilitated out-of-class practice.

Students demonstrated moderate to high engagement with audio materials, reflecting varied levels of home practice habits. While most students used the accompanying audio CD as instructed, a few showed lower engagement, possibly due to differences in access or learning preferences. Peer collaboration was frequently observed, particularly during group exercises and feedback exchanges, indicating a strong social learning environment fostered by the interactive components of the training sessions.

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Another important behavioral indicator was students' willingness to self-correct, which was rated high across sessions. Many students identified their own errors and made adjustments without prompting, reflecting increasing metacognitive awareness and ownership of learning. In addition to behavioral observation, students' final performances were formally assessed using a rubric-based evaluation. Each student completed a rhythmic transcription task at the end of the program, which was independently scored by two qualified raters. The results of this evaluation are summarized in table 6.

Table 6. Final Performance Scores (rubric-based evaluation)

Criterion	Mean Score (out of 10)	SD
Notation Accuracy	9.4	0.5
Rhythmic Fluency	9.1	0.6
Formatting and Presentation	8.8	0.7
Overall Average	9.1	0.51

The scores indicate a high level of proficiency in all evaluated areas. Notation accuracy received the highest mean score (9.4), suggesting that students were able to apply correct rhythmic values with minimal errors. Rhythmic fluency, with a mean of 9.1, reflects students' ability to represent rhythm sequences consistently and smoothly. Although slightly lower, the score for formatting and presentation (8.8) remained strong, showing that students generally adhered to standard music notation conventions, albeit with minor inconsistencies in layout or spacing.

To ensure the reliability of the scoring process, inter-rater agreement was calculated using Cohen's Kappa, resulting in a coefficient of $\kappa = 0.91$. This value indicates excellent consistency between the two independent raters, further reinforcing the objectivity and credibility of the performance evaluations. Overall, both the behavioral observations and performance assessments support the conclusion that the training kit fostered not only technical skill development but also positive learning dispositions, such as collaboration, self-regulation, and reflective practice. These qualitative gains complement the quantitative improvements reported in earlier sections, highlighting the multidimensional benefits of the instructional intervention.

4.5. Discussion

The findings of this study provide compelling evidence that the data-driven training kit was highly effective in enhancing students' music note recording skills. The statistically significant improvement in test scores ($p < 0.001$), accompanied by a very large effect size (Cohen's $d = 2.53$), demonstrates that the intervention had a substantial impact on student learning outcomes. This result confirms that the kit did not merely support superficial performance improvements, but rather facilitated meaningful and measurable skill development in music note recording transcription.

In addition to performance gains, the training kit received consistently high ratings from both expert evaluators and student users. Experts confirmed the pedagogical integrity of the kit, highlighting its content accuracy, instructional clarity, and cultural relevance. Students reported very high levels of satisfaction across multiple dimensions, particularly in terms of ease of use, engagement, and perceived usefulness for both in-class and independent practice. These perceptions suggest that the training kit was not only effective from a content perspective but also well-received as a practical and motivational learning tool.

Furthermore, behavioral observations and rubric-based performance assessments revealed that students exhibited increasingly positive learning behaviors over the course of the intervention. These included active participation, peer collaboration, independent study, and self-correction. The emergence of such behaviors indicates that the training kit supported not only cognitive learning but also the development of metacognitive awareness, learner autonomy, and collaborative learning dispositions.

Overall, the results align with existing literature on music pedagogy that advocates for active, multimodal, and scaffolded instruction in skill-based domains. The integration of visual and auditory materials, the gradual increase in music note recording complexity, and the structured opportunities for self-assessment likely contributed to both cognitive mastery and motivational engagement. These features reflect key principles of contemporary instructional design and affirm the value of combining traditional music theory with data-informed, learner-centered methodologies.

The effectiveness of the training kit is evidenced not only by significant quantitative learning gains but also by high levels of expert endorsement, student satisfaction, and the cultivation of productive learning behaviors. This

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multifaceted success highlights the potential of structured, resource-rich learning interventions in advancing music education at the undergraduate level. Figure 2 is illustrating the package of training set for developing note-recording skills and the audio CD.

Figure 2. The Training Set for Developing Note-Recording Skills and the Audio CD

5. Conclusion

This study investigated the effectiveness of a data-driven training kit in improving music note recording skills among undergraduate students in a music education program. The findings provide strong empirical support for the kit's instructional value, as evidenced by significant improvements in pre-test and post-test scores, a very large effect size, and consistent positive feedback from both expert evaluators and student participants.

The training kit was successful in promoting not only cognitive gains in music note recording transcription but also encouraging active participation, independent learning, and self-reflective behavior. The integration of visual and auditory materials, progressive complexity in time signatures, and structured opportunities for self-assessment contributed to a holistic and engaging learning experience.

In sum, the training kit proved to be an effective, practical, and well-received instructional tool that aligns with best practices in music pedagogy. It offers a promising model for integrating multimodal, data-informed materials into formal music education, particularly in contexts where music note recording literacy remains a foundational yet underdeveloped skill. Future studies may explore its adaptation across different musical genres, educational levels, or delivery formats, including hybrid or fully digital learning environments.

6. Declarations

6.1. Author Contributions

Conceptualization: T.C.; Methodology: T.C.; Software: T.C.; Validation: T.C.; Formal Analysis: T.C.; Investigation: T.C.; Resources: T.C.; Data Curation: T.C.; Writing Original Draft Preparation: T.C.; Writing Review and Editing: T.C.; Visualization: T.C.; The author has read and agreed to the published version of the manuscript.

6.2. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.3. Funding

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6.4. Institutional Review Board Statement

Not applicable.

6.5. Informed Consent Statement

Not applicable.

6.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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