

Development Of Learning Style- Based Framework For SPA Music Programs In The Division Of Cavite Schools

Cristina N. Morales ¹, Dave Christian Caparas ¹
cristinanibay@gmail.com / davechristianc@gmail.com

Publication Date: May 21, 2026

DOI: 10.5281/zenodo.21789596

Abstract

This study focused on developing a learning-style-based framework for Special Program in the Arts (SPA) Music Programs in the Division of Cavite Schools, ensuring that students with different learning preferences – visual, auditory, and kinesthetic, receive instruction that best supports their growth. Given that traditional teaching methods often follow a one-size-fits-all approach, this research aimed to create a more inclusive and engaging model tailored to the diverse cognitive and sensory needs of music students. Using the mixed-methods approach, the study gathered insights from surveys and interviews with SPA music students, teachers, and administrators across Cavite. Findings show that students learn best through multisensory experiences, hands-on activities, collaborative learning, and technology-assisted instruction. Many students benefit from peer mentoring, performance-based learning, and differentiated instruction, highlighting the importance of flexible teaching strategies. The learning-style-based instructional framework developed in this study offers a structured guide for music educators to implement constructivist, collaborative, and technology-enhanced teaching methods in SPA programs. It provides practical strategies such as curriculum redesign, professional development for teachers, adaptable learning environments, and diverse assessment techniques to better address students' individual learning needs. This research serves as a valuable resource for teachers, school administrators, and policymakers seeking to make music education more inclusive, engaging, and responsive, ensuring that all students have the opportunity to develop their musical talents effectively.

Keywords: *Music Education, Learning Styles, Instructional Framework, Differentiated Instruction, Inclusive Education*

1. Introduction

Music education in the Special Program in the Arts (SPA) of the Division of Cavite Schools is of paramount importance in nurturing the gifts of Filipino students with talent in the arts. Nevertheless, conventional methods of instruction frequently depend on uniform approaches that are not appropriate for different students in the SPA; for instance, many students learn effectively through visual, auditory, or kinesthetic channels. This generalized approach may generate boredom and restrict the students' abilities since some students might require alternative approaches. The justification for this research is that there is a need to develop a framework that will guarantee inclusion, responsiveness, and effectiveness, which is important for achieving both artistic development and educational success. The study aims to show how to create a framework based on learner-centered design effects aimed at improving the instructional process in SPA music programs because the implemented improvements are expected to lead to the engagement of learners and benefit their holistic development in the field of arts.

The existing literature supports the idea that music education should be tailored to the specific needs of learners. Darrow (2014) and Appleton et al. (2017) conclude that spa students tend to benefit from active learning experiences (i.e., hands-on and visual experience), thus proving that traditional lecture methods are not useful for them. Elmunsyah et al. (2019) argue that augmented reality as well as multimedia can be used to develop immersive learning experiences. Finally, McDermott et al. (2016) highlight the significance of using the components of visual and performing arts in classroom processes. These studies imply that the necessity of promoting differentiated instruction would lead to the creation of the framework that is capable of addressing the needs of the students in SPA.

However, there is still no systematic application of the principles of instructional design to SPA music programs. Unfortunately, many teachers continue to use traditional methods, thus failing to work with diverse learning styles of their learners. Therefore, it is essential to conduct this research to explore learning styles and cognitive characteristics of students as well as analyze the instructional techniques currently used in order to find new ways of making SPA instruction more inclusive and responsive. Overall, the problem of the research is that there is no organized framework for integrating differentiated and multisensory approaches to SPA music teaching.

This study, conducted in 2025, aimed to comprehensively analyze the lived experiences of Business Process Outsourcing (BPO) nurses under Flexible Work Arrangements (FWAs) in Alabang, Muntinlupa, Philippines, given their growing importance and mixed findings on their impact on well-being and organizational performance (Yücel & Fan, 2023; Aytona et al., 2022).

The field of music education has long recognized the need to cater to diverse learning styles and cognitive abilities of students. However, traditional instructional approaches often fall short in addressing the unique needs of learners, particularly those in specialized arts programs. Consequently, many students in such programs may struggle to engage with the content or feel empowered to participate fully in the learning process.

To address this issue, this study sought to explore innovative instructional materials and technologies that can support diverse learning styles in special programs for the arts, with a particular focus on music education programs. The aim of the study was to develop a instructional framework for creating inclusive and engaging music environment that can enhance

learning outcomes for diverse students by leveraging principles of learner-centered design (Iwaguchi, 2012) (Plaza & Espigares, 2016).

1. What are the learning styles and cognitive characteristics of students in special programs for the arts, particularly in the music programs?
2. What instructional design approaches are currently used by teachers in music education?
3. What other instructional design approaches may be utilized for inclusive education to engage student respondents' music learning experiences?
4. Based on the findings, what instructional framework may be developed to address the diverse learning styles of the respondents?

2. Materials and Methods

Research Design

A mixed-methodology approach was utilized in the study, which incorporated both qualitative and quantitative methods aimed at finding the learning styles of students studying in arts-related programs (SPA) and the methods of teaching utilized by educators. In terms of quantitative research, the topic of students' learning preferences was investigated through means of surveys. As for qualitative approach, interviews have been conducted so that teaching styles and corresponding challenges could be thoroughly analyzed. Through the use of both methods in the research, triangulation of methods was achieved which means that obtained research results received a higher validity level.

The application of mixed-method in the study was determined by the need to balance between data collection and description methods. Surveys were instrumental in obtaining quantitative data regarding the distribution of students' learning styles among students, while interviews and conversations provided the researcher with necessary details regarding educator's opinions.

Participants

The study involved Grade 10 students taking SPA Music as well as their music instructors and authorities in charge of the program from different schools in the Division of Cavite. Grade 10 was the level selected as it is one of the critical parts of the development with the student consolidating academic and artistic skills at that time. In order to ensure diversity of respondents among the teachers and students, purposive sampling was used to ensure inclusion of individuals with different types of learning and teaching styles. Students were requested to fill in questionnaires in order to provide quantitative data while teachers took part in interviews to offer more qualitative information.

The sample size was chosen to cover first of all one level and specific schools, indicating the limitations of the current research. Although this limited the generalizability of findings, the depth of study was a definite advantage. The teachers were selected due to their involvement in SPA music. Students were engaged into the study in order to get the right approach to understand music teaching approach from their point of view.

Instruments

In this study, two instruments were used: a validated learning style assessment questionnaire for students and semi-structured interview guides for teachers and principals. The questionnaire revealed students' major learning styles in visual, auditory and kinesthetic categories, while the interview forms examined their responses to different instructional methods. The validation of the instruments was performed to verify their reliability concerning the study's goals.

The learning style assessment was made simple enough for Grade 10 students so that their answers were as correct as possible. It was also flexible enough for the interviewers to ask follow-up questions during the interview and thus to obtain detailed information about educational practices used by instructors. The mentioned instruments were piloted prior to full administration to check their relevance and clarity. The combined use of questionnaires and interviews was employed for detailed investigation of the working research issue.

Procedure

The method of conducting research includes obtaining approvals from the principals and administrators of the educational institutions followed by sending consent forms to the participants. Surveys were conducted with the students of class 10 during the scheduled class time which provided ease of administration while ensuring a minimum disruption to their studies. Interviews were administered with the teachers and administrators at mutually agreed times and places in order to elicit deep and reflective responses. The process of data collection took a few weeks in order to suit the school calendar and to ensure the participants' participation.

The researchers ensured that the participants had all the details and information about the purpose and the scope of the current research study. The students were explained the survey process to ensure clarity in their responses. Teachers and administrators were encouraged to express their unreserved thoughts during the interviews while being assured that their opinions would not be disclosed to others. The researchers followed all the ethical norms while doing this research avoiding any bias in data collection.

Data Analysis

The quantitative data collected from the student surveys were analyzed through descriptive statistics with an aim to monitor the distribution of the types of learning and preferences among respondents. Results of this analysis gave information about trends regarding preferences and dominant modalities applied by the students of SPA music. This information also pinpointed trends that allowed setting the design of the instructional framework. The information about the preferences was converted into quantitative data, establishing an empirically strong basis for recommendations.

The qualitative data gathered from interviews with teachers and administrators were analyzed using thematic analysis, searching for recurring themes, problems, and opportunities. Themes were extracted showing current strengths and weaknesses of the instructional approach. The synthesis of findings received through quantitative and qualitative analysis provided strong

validation of the results, confirming that the proposed instructional framework is based on evidence and relevant to the context.

3. Results

Learning Styles and Cognitive Characteristics of Learners in SPA, Particularly in Music Program

Table 1. How Students Use Their Physical Senses in Music

Items	Mean	SD	Verbal Interpretation
1. Students remember music lessons better when they write down notes or draw diagrams.	2.50	0.572	High
2. Students can easily visualize musical notes or patterns when they hear a melody.	2.03	0.669	Moderate
3. Highlighting or marking sheet music help students focus and remember better.	2.53	0.629	High
4. Students need written instructions or visual aids (e.g., charts or diagrams) to understand a concept.	2.50	0.630	High
5. Charts, diagrams, or sheet music help students understand and practice new music pieces.	2.70	0.466	High
6. Students enjoy listening to recordings of music pieces to guide their practice.	2.97	0.183	High
7. Students learn best when they can physically engage with an instrument or musical activity.	2.77	0.430	High
Total	2.57	0.054	High

The findings in Table 1 reveal how students in special music programs use their senses to learn. The overall mean score of 2.57 suggests that they rely on different sensory

methods to improve their understanding of music. Many students find auditory learning helpful. The highest-rated statement, with a mean of 2.97, shows that listening to recordings supports their practice. Repeated exposure to music strengthens their ability to recall rhythms and

melodies. According to Berklee College of Music (2023), students in arts programs perform better when learning environments focus on auditory instruction and hands-on experiences.

Kinesthetic learning is also evident in the results. A mean score of 2.77 indicates that students prefer engaging with instruments and participating in musical activities. They benefit from physical interaction with music. Visual learning is another important factor in their development. Charts, diagrams, and sheet music provide structure, making it easier to recognize musical patterns. This is shown in the mean score of 2.70. Appleton et al., (2017) found that students in specialized arts programs absorb complex information more effectively when exposed to visual-spatial learning techniques.

While auditory and kinesthetic learning are dominant, some students struggle with visualizing musical notes or patterns when hearing a melody. The lower mean score of 2.03 suggests that abstract visualization is not their strongest approach. However, many rely on structured guidance. Writing notes, highlighting sheet music, and using visual aids support their learning, as shown by mean scores ranging from 2.50 to 2.53.

These results emphasize the need for teaching methods that integrate different learning styles. Students benefit when educators use multiple approaches to keep them engaged. By combining auditory, kinesthetic, and visual strategies, teachers can help students strengthen their musical skills

Table 2. How Students Expose Themselves to Music Learning Situations

Items	Mean	SD	Verbal Interpretation
1. Students learn music more effectively when practicing in groups rather than alone.	2.60	0.498	High
2. Students enjoy discussing musical concepts or sharing ideas with classmates.	2.50	0.630	High
3. Students feel more focused when practicing music by themselves without interruptions.	2.53	0.571	High
4. Students get inspired by collaborating or performing with others.	2.80	0.484	High
5. Students like exploring musical techniques independently without much instruction.	2.00	0.695	Moderate
6. After group practices or rehearsals, students	2.47	0.571	Moderate

need quiet time to review what they learned.

7. Students feel more comfortable participating in musical activities where everyone contributes equally. 2.83 0.379 High

Total	2.53	0.547	High
--------------	-------------	--------------	-------------

Table 2 presents the different ways students engage in music learning situations. The overall mean score of 2.53 suggests that students benefit from both collaborative and individual learning experiences. Some students thrive in group settings, while others prefer to practice alone. The highest mean score, 2.83, indicates that students feel more comfortable when participating in musical activities where everyone has a role. Being part of a group allows them to feel included, and makes the learning process more enjoyable. In addition, a mean score of 2.80 shows that collaboration and performance inspire students to develop their skills further. When they work with others, they feel more motivated to improve.

For many students, learning music in a group setting is highly effective. A mean score of 2.60 suggests that practicing with others enhances their understanding of musical concepts. Group discussions also influence their learning process. The mean score of 2.50 shows that students enjoy talking about music and exchanging ideas with classmates. Through these conversations, they gain new perspectives and insights. However, independent learning is just as valuable. A mean score of 2.53 reveals that some students prefer practicing alone because it helps them stay focused. Without interruptions, they can concentrate on refining their techniques.

Some students also need time to reflect on what they have learned after group rehearsals. A mean score of 2.47 suggests that reviewing lessons in a quiet setting helps reinforce musical concepts. Although collaboration is beneficial, not all students rely on group learning. The lowest mean score, 2.00, shows that some students prefer to explore musical techniques on their own. They enjoy experimenting without following strict instructions. This suggests that while group learning is important, independent learning also influences a student's development.

According to Li (2014), social interaction is an important factor in promoting creativity among music students. Engaging with peers allows them to exchange ideas, refine their techniques, and develop a deeper understanding of music. On the other hand, Perignat and Katz-Buonincontro (2018) pointed out that traditional lecture-based music instruction does not always support the diverse learning styles of students in arts programs. Because students learn in different ways, an instructional approach that combines group activities with independent exploration may be more effective.

Table 3. How Students Approach Musical Tasks

Items	Mean	SD	Verbal Interpretation
1. Students prefer clear instructions and step-by-step guidance for learning a new song.	2.67	0.479	High
2. Students enjoy figuring out how to play or compose music on their own.	2.37	0.615	Moderate
3. Students like to plan their practice sessions and organize their sheet music before starting.	2.20	0.714	Moderate
4. Students prefer exploring creative ways to interpret music rather than following strict rules.	2.20	0.551	Moderate
5. Students feel comfortable when they have the freedom to experiment with different styles.	2.60	0.563	High
6. Students take time to fully understand the meaning or emotion of a piece before performing it.	2.47	0.507	Moderate
7. Students enjoy challenges that allow them to push their musical abilities further.	2.70	0.596	High
Total	2.46	0.575	Moderate

Table 3 presents how students approach musical tasks. With an overall mean score of 2.46, students exhibit a quite moderate inclination for organized learning. Some at the same time show an interest in autonomous and artistic methods. With a mean score of 2.70, many students seem to love musical difficulties pushing their capacity forward. This suggests that they are eager to advance their abilities by working on increasingly difficult assignments.

Given a mean of 2.67, many students clearly favor structured learning. Clear directions and methodical supervision help them to pick up a new song more quickly. This result is consistent with the research by Magtoto et al. (2015), which underlines how organized learning enables students to become confident and master in specialized music courses. Some students, on the

other hand, cherish artistic liberty. With a mean score of 2.60, they seem at ease trying several musical genres. Supporting this is Berklee College of Music (2023), which says that practical and creative learning environments help to increase student involvement and artistic development in music courses.

Apart from structured learning, some students would rather engage in independent research. With a mean score of 2.37, they clearly appreciate experimenting with composition or performance without depending on outside direction. On the other hand, planning practice sessions and arranging their educational process got a mean score of 2.20. This implies that although many students want a more flexible and spontaneous approach to learning, even if they understand the need of preparation. These differences may be explained by Bernard (2023), who indicates that children in specialized arts programs have different cognitive and sensory learning preferences.

Students also give music learning's emotional component some thought. A mean score of 2.47 suggests that they take time to understand the meaning or emotion behind a piece before performing it. This indicates the need for teaching strategies that promote both technical skills and emotional expression. Perignat and Katz-Buonincontro (2018) argue that traditional lecture-based instruction may not fully support students' creative and emotional learning needs.

Table 4. How Students Process Information in Music

Items	Mean	SD	Verbal Interpretation
1. Students prefer short and simple instructions for learning new musical techniques.	2.37	0.615	Moderate
2. Students understand music better when they see examples or demonstrations of how to play it.	2.90	0.305	High
3. Students remember rhythms and melodies better when they hear them repeatedly.	2.73	0.521	High
4. Students focus on understanding the overall mood or story of a piece rather than details.	2.30	0.535	Moderate
5. Students enjoy exercises like filling in missing notes or improvising music challenges.	2.30	0.750	Moderate

6. Students need detailed explanations and examples to fully understand a musical concept.	2.50	0.572	High
7. Students pay attention to small details in music, such as dynamics or articulation.	2.57	0.568	High
Total	2.52	0.552	High

Table 4 shows how students process musical information. The overall mean score is 2.52, which indicates that students have a high level of engagement in learning music. However, they process information in different ways. The highest mean score, 2.90, shows that students learn better when they see demonstrations or visual examples. This suggests that visual learning influences them in helping them understand music more effectively.

Students also have strong auditory memory. This is evident in the mean score of 2.73, which suggests that hearing rhythms and melodies repeatedly helps them remember better. On the other hand, their preference for short and simple instructions received a moderate score of 2.37. While they may find brief instructions helpful, they might still need more guidance to fully understand musical techniques. The need for detailed explanations and examples scored 2.50, meaning that students also rely on structured guidance to improve their learning.

These results are consistent with the findings of Darrow (2014), who stressed the importance of using different teaching methods in specialized arts programs. Since students learn in various ways, it is beneficial to combine hands-on activities, visual aids, and auditory learning to suit their needs. Perignat and Katz-Buonincontro (2018) also pointed out that traditional lecture-based teaching may not be the best approach for students in arts programs. Instead, interactive and experiential learning can help them engage better with musical concepts.

Furthermore, teaching music effectively requires different approaches. Visual demonstrations, repeated listening, and detailed explanations are all influences in helping students process and remember information. Educators should use a variety of strategies to support students' learning and help them develop both their technical skills and creativity.

Current Instructional Design Used by Teachers in Music Education

According to reports from teachers, instructional design methods in place are still based on conventional teaching styles that take the form of lectures, rote learning, and practice with the focus on achieving certain goals in performance. While these methods introduce some sort of framework, many teachers have acknowledged that they have their limitations when it comes to accommodating the diversity of learning styles among students. A range of teachers stressed the significance of demonstration and modeling since it is much easier to learn for kinesthetic learners who prefer seeing and copying the techniques used in music. School administrators stated that when designing the curriculum, they usually follow a set pattern, which implies less

scope for individual approach to the students' needs. The analysis of qualitative research data has shown that, in spite of the dominance of traditional methods, teachers realize that they cannot meet every educational requirement of students.

At the same time, it should be noted that teachers and school administrators mention some of the practices that try to reduce the gap. For instance, collaborative learning, peer tutoring, and performance-oriented tasks have been used in lessons more frequently to be able to engage the students more in the learning process. The use of the media in teaching has been considered to become one of the newest trends, though the access to the technologies varies from one school to another. Teachers show great interest in differentiated instruction; however, they admit that their lack of experience in the use of the approach represents one of the serious obstacles for its application. Administrators believe that there is a great need for teachers' training in the area of professional development, which is supposed to help them learn how to work with students with different learning styles.

Other Instructional Design Approaches to be Utilized for Inclusive Education

In the interviews, educators deemed multisensory teaching methods to be highly beneficial. They suggested that it is important to include elements that stimulate the senses of sight, hearing, and movement in lessons in order to speak to the needs of different types of learners. The interviews showed that technology-assisted education is an effective way to secure fully immersive learning experience. The respondents mentioned that teaching with the help of different means of technology, including applications for music creation, multimedia presentations, and augmented reality tools can help create engaging lessons and thus improve students' learning outcomes. Additionally, participants mentioned that cooperative learning has great potential as an effective approach to teaching. The respondents emphasized that mutual mentorship and sharing experience can foster collaboration and better understanding of music. To finish, administrators pointed out that differentiated instruction, i.e. modification of tasks and tests to cater for individual learning styles of students, can help ensure that all learners receive the necessary assistance and adequate challenge from their educational process.

Also, participants explained that performance-based and experiential learning should occupy the central position in music education process. Participants mentioned that learning opportunities are most effective when the students engage in the process of creating music rather than just listening to the tutor or teacher. They mentioned that project-based learning is also an effective way to engage students in their educational process. Administrators underlined the need to train teachers in using innovative approaches in teaching.

4. Discussion

Survey data indicated that the students of SPA music in Cavite exhibited varying inclinations with respect to learning styles, the majority of them being visual and kinesthetic learners and not many availing of auditory learning methods instead. The above finding was in accordance with the findings of Aisami (2015), according to which visual literacy and sensory media are essential for academic achievement. Data on the frequency distributions suggested that students preferred

multi-sensory approaches such as using both visual aids and hands-on experience as opposed to being taught through lectures and text-based materials. Quantitative results also pointed out the fact that the activities based on collaboration were mentioned to be quite engaging, which correlates with Chiriac (2014) research on groupwork as a great motivation for learning. Data showed that learners exhibited different learning styles, which indicated the need for differentiated instructions as there is no dominant modality for learners from SPA music (Malacapay, 2019).

The quantitative data showed that technology-based instruction was valued by the students as there were cases when students reported to have been more engaged during the lessons that included the use of multimedia, applications, or platforms. This corresponds to the findings of Elmunsyah et al. (2019) who proved the fact that academic achievement increased with the use of augmented reality. Results of the surveys demonstrated the fact that the use of peer mentoring and group projects was noted to be valuable as well which coincides with the ideas of social learning in music education (Creech, Varvarigou, and Hallam, 2020). However, surveys pointed to problems in gaining access to technology as some students stated that they had not had much access to innovative tools due to poor infrastructure. Thus, overall results indicate a necessity for incorporation of multisensory, collaborative, and technology-based teaching strategies into the system of teaching at SPA music.

Interviews done with teachers and administrators gave deep insights into techniques of instructional design used presently and barriers to be faced in addressing diverse learning styles. The teachers did agree that they were following traditional methods based on techniques of lecture method, memorization, and practicing, which they had noticed did not suffice to get all students engaged in their educational process. Application of demonstration and modeling was common practice anyways, which was more important for kinesthetic students. However, administrators admit that standard curricula restrict the freedom in design (Andrews, 2004). However, the educators mentioned their wish to implement differentiated instruction methods, but barriers in form of lack of training and support were mentioned, too (Darrow, 2014).

Participants were also able to name some alternative methods of instruction that could improve inclusivity and increase engagement for staff and students. Teachers mentioned the use of multisensory learning, collaborative projects and performance-based learning activities. Administrators pointed out the chances of using technology-assisted instruction methods, such as different kinds of multimedia technologies (Kim, 2013; Ng, Ng, & Chu, 2022). Both groups asserted the importance of professional development programs that could help teachers acquire knowledge and skills for effective use of these approaches (Alojado, 2024). Moreover, students confirm that among various teaching techniques peer mentoring and experiential learning were found to be the most effective. All in all, the qualitative results confirmed the quantitative data, stating that educational framework in SPAs music programs should include a model that embraces constructionism, collaboration, and technology use in the practice.

5. Conclusion

The study revealed various styles of learning among SPA music students in Cavite where visual and kinesthetic approaches were found to be the most popular. The quantitative results obtained confirmed the idea that students have a preference for using various methods and learning in a multisensory, team-based and performance-oriented learning environment as well as the fact that the use of technology improves students' engagement and independence in learning. What is more, considering qualitative data obtained from the teachers and administrators, it was found out that traditional teaching methods, such as lecturing and drill performances, still dominate in education practice though the necessity of differentiating students by means of learner-centered teaching approaches were also identified.

The proposed learning-style-based instructional framework for teaching should comprise practical recommendations for music teachers enabling them to redesign the curriculum and carry out professional development as well as differentiated assessment. The framework is aimed at showing the importance of flexible learning conditions, peer instruction, and utilization of new technologies by the educators in the educational process. The framework corresponds to the theory of multiple intelligences (Sternberg et al., 2011) as well as learner-centered design (An & Mîndrilă, 2020), thus assuring inclusiveness and responsiveness of SPA music programs.

References

- Abrahams, F. (1992). A Learning-Styles Approach for At-Risk Students. *SAGE Publishing*, 6(1), 22-26. <https://doi.org/10.1177/104837139200600107>
- Aisami, R. S. (2015). Learning Styles and Visual Literacy for Learning and Performance. *Elsevier BV*, 176, 538-545. <https://doi.org/10.1016/j.sbspro.2015.01.508>
- Alnajem, M. (2020). Learning by doing: An undergraduate lean A3 project in a Kuwaiti bank. *The TQM Journal*, 33(1), 8-17. <https://doi.org/10.1108/TQM-12-2019-0290>
- Alojado, G. (2024). Teachers' best practices in meeting diverse learners' needs: An exploratory sequential design. *Southeast Asian Journal of Multidisciplinary Studies*, 4(2).
- An, Y., & Mîndrilă, D. (2020). Strategies and Tools Used for Learner-Centered Instruction. 4(2), 133-143
- Andrews, B. W. (2004). Curriculum Renewal Through Policy Development In Arts Education. *SAGE Publishing*, 23(1), 76-93. <https://doi.org/10.1177/1321103x040230011001>
- Appleton, L., Montero, G. G., & Jones, A. (2017). Creative Approaches to Information Literacy for Creative Arts Students. *Communications in Information Literacy*, 11(1), 147-147. <https://doi.org/10.15760/comminfolit.2017.11.1.39>
- Bailey, F., Kavani, A., & Johnson, H. (2021). Changing the narrative on COVID-19: Shifting mindsets and teaching practices in higher education. *Policy Futures in Education*, 20(4), 1-21. <https://doi.org/10.1177/14782103211055189>
- Bautista, J. M. G. (2022). Learning and transitional experiences of students amid the pandemic. College of Education and Human Development, Baliuag University. https://www.academia.edu/download/94550128/Learning_and_Transitional_Experiences_of_Students_Amid_the_Pandemic.pdf
- Beltran, K. A., Agripa, S. A., Bustarga, A. J. O., Dela Cruz, K. B., Marmol, S. L., & Morallo, S. J. A. (2025). *Practices and challenges in implementing inclusive education in Philippine elementary schools*. *Journal of Education Research*, 6(1), 8–22.
- Berklee College of Music (2023, January 1).
- Bernard, R. (2023). Necessary for some, and helpful for all: preparing music educators to reach every student. *Universidade do Estado de Santa Catarina*, 8(1), e01010e01010. <https://doi.org/10.5965/2525530408012023e0110>
- Best Practice Guidelines on Research Integrity and Publishing Ethics. (2020, April 15). <https://authorservices.wiley.com/ethics-guidelines/index.html>
- Best Practices in Ethical Publishing*. (2020). Wiley Author Resources.
- Bugayenko, Y. (2023, October 11). *The Method Section: A Recipe for Research*.
- Challenges, N. G. L. (2023, February 6). *Learner Centered Design at RPA High School | NGLC*.

- Cheng, L. (2024). Educational affordances of music video games and gaming mobile apps. *Technology, Pedagogy and Education*, 33(3), 331-345. <https://doi.org/10.1080/1475939X.2024.2319171>
- Cherry, K. (2024, July 12). What is sociocultural theory? Verywell Mind. <https://www.verywellmind.com/what-is-sociocultural-theory-2795088>
- Chiriac, E. H. (2014). Group work as an incentive for learning – students’ experiences of group work. *Frontiers in Psychology*, 5, 558. <https://doi.org/10.3389/fpsyg.2014.00558>
- Concina, E. (2019). The role of metacognitive skills in music learning and performing: Theoretical features and educational implications. *Frontiers in Psychology*, 10, 1583. <https://doi.org/10.3389/fpsyg.2019.01583>
- Creech, A., Varvarigou, M., & Hallam, S. (2020). Contexts for music learning and participation: Developing and sustaining musical possible selves. Springer. <https://doi.org/10.1007/978-3-030-48262-6>
- Darrow, A. (2014). Differentiated Instruction for Students With Disabilities. *SAGE Publishing*, 28(2), 29-32. <https://doi.org/10.1177/1048371314554279>
- Department of Education (2020). *Guidelines for Curriculum Development*.
- DepEd Memorandum No. 335, s. 2004. Implementation of the Special Program in the Arts Curriculum in a Public Secondary School. <https://www.deped.gov.ph/2004/08/12/august-12-2004-dm-335-s-2004-national-conference-of-key-implementors-of-the-special-programs-in-the-arts-and-sports/>
- Design, C. (2023, January 4). *Our Learner-Centered Framework*.
- Duarte, J. dos S., Alcantara, W. A., Brito, J. S., Barbosa, L. C. S., Machado, I. P. R., Furtado, V. K. T., dos Santos-Lobato, B. L., Pinto, D. S., Krejcová, L. V., & Bahia, C. P. (2023). Physical activity based on dance movements as complementary therapy for Parkinson’s disease: Effects on movement, executive functions, depressive symptoms, and quality of life. *PLOS ONE*, 18(2), e0281204. <https://doi.org/10.1371/journal.pone.0281204>
- Elmunsyah, H., Hidayat, W., & Asfani, K. (2019). Influence of Augmented Reality on the Achievement and Student Learning Independence. <https://doi.org/10.1109/isemantic.2019.8884279>
- Emanuel, E. J., Wendler, D., Killen, J., & Grady, C. (2004). What Makes Clinical Research in Developing Countries Ethical? The Benchmarks of Ethical Research. *Oxford University Press*, 189(5), 930-937. <https://doi.org/10.1086/381709>
- Emerald Publishing Limited. <https://doi.org/10.1108/aaouj-09-01-2014-b004>
- Erfe, J. P., Ancho, I. V. (2022). Gender-fair music education practices in junior high school. *The Normal Lights*, 22(2): 1-27.
- Gay, G. (2018). Culturally Responsive Teaching: Theory, research, and practice (3rd ed.). Teachers College Press.

- Gouzouasis, P. (2006). Technology as Arts-Based Education: Does the Desktop Reflect the Arts? *Taylor & Francis*, 107(5), 3-9. <https://doi.org/10.3200/aepr.107.5.3-9>
- Govender, S., Proches, C. G., & Kader, A. (2018). Examining leadership as a strategy to enhance health care service delivery in regional hospitals in South Africa. *Dove Medical Press, Volume 11*, 157-166. <https://doi.org/10.2147/jmdh.s151534>
- Haugsbakken, H. (2020). Five Learning Design Principles to Create Active Learning for Engaging with Research in a MOOC. *De Gruyter*, 23(1), 32-45
- Hess, J. (2020). Finding the “both/and”: Balancing informal and formal music learning. *International Journal of Music Education*, 38(3), 266-278. <https://doi.org/10.1177/0255761420917226>
- Hickey, S., & Correia, A.-P. (2024). Centering the learner within instructional design: The evolution of learning design and the emergence of learning experience design (LXD) in workforce training and development. *Journal of Educational Technology Systems*, 52(4), 1-23. <https://doi.org/10.1177/00472395231226094>
- Ismail, M. J., Chiat, L. F., & Farhana, A. (2021). ‘Music in film’ for gifted students: The effect of differentiated learning on students’ motivation. *Pertanika Journal of Social Sciences and Humanities*, 29(4), 2709-2728. <https://doi.org/10.47836/pjssh.29.4.33>
- Iwaguchi, S. (2012, June 1). From student evaluations to teacher performance: a study of
- Jeong, S., Clyburn, J., Bhatia, N. S., McCourt, J., & Lemons, P. P. (2022). Student thinking in the professional development of college biology instructors: An analysis through the lens of sociocultural theory. *CBE—Life Sciences Education*, 21(2), ar30. <https://doi.org/10.1187/cbe.21-01-0003>
- Kalyani, L. K. (2024). The role of technology in education: Enhancing learning outcomes and 21st century skills. *International Journal of Scientific Research in Modern Science and Technology*, 3(4), 5-10. <https://doi.org/10.59828/ijrmst.v3i4.199>
- Kim, E. (2013). Music technology-mediated teaching and learning approach for music education: A case study from an elementary school in South Korea. *SAGE Publishing*, 31(4), 413-427. <https://doi.org/10.1177/0255761413493369>
- Learning in a Visual Age. (2023). <https://www.arteducators.org/>
- Learning in a Visual Age. (2023, January 1). <https://www.arteducators.org/advocacypolicy/learning-in-a-visual-age>
- Li, K. C. (2014, September 1). *How flexible do students prefer their learning to be?*
- Li, X. (2013, April 11). *Research Guides: Research Methods: Ethics in Research*. <http://libguides.library.cityu.edu.hk/c.php?g=424062&p=2896196>
- LINCS. (2019, April 8). *TEAL Center Fact Sheet No. 6: Student-Centered Learning*
- Magtoto, F. O., Bustos, M. T. A. P., Tantengco, M. T. T., Abaya, E. C., Javinar, J. C.,

- Major, L., Haßler, B., & Hennessy, S. (2017). Tablet use in schools: Impact, affordances, and considerations. In A. Marcus-Quinn & T. Hourigan (Eds.), *Handbook on digital learning for K-12 schools* (pp. 115-128). Springer International Publishing. https://doi.org/10.1007/978-3-319-33808-8_8
- Malacapay, M. (2019). Differentiated instruction in relation to pupils' learning style. *International Journal of Instruction*, 12(4), 625-638. <https://doi.org/10.29333/iji.2019.12440a>
- Martillano, D. A. (2019). Perceived aesthetic experience in the context of tactile art among visually impaired individuals in the Philippines. *RSU international research conference 2019*: 543-553.
- Maxwell, J. A. (1996, April 12). *Qualitative Research Design: An Interactive Approach*.
- May 17, 2010 DO 54, s. 2010 – Strengthening the Implementation of the Special Programs in the Arts and in Sports (SPA and SPS) | Department of Education. (2010, May 17). <https://www.deped.gov.ph/2010/05/17/do-54-s-2010-strengthening-the-implementation-of-the-special-programs-in-the-arts-and-in-sports-spa-and-sps/>
- Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review*, 36, 8. <https://doi.org/10.1007/s10648-024-09627-w>
- McDermott, P. A., Falk-Ross, F., & Medow, S. (2016). Using the visual and performing arts to complement young adolescents' "close reading" of texts. *Taylor & Francis*, 48(1), 27-33. <https://doi.org/10.1080/00940771.2017.1243925>
- Moher, D., Naudet, F., Cristea, I. A., et al. (2018). Assessing scientists for hiring, promotion, and tenure. *Public Library of Science*, 16(3), e2004089-e2004089. <https://doi.org/10.1371/journal.pbio.2004089>
- Mok, A. O. (2017). Informal learning: A lived experience in a university musicianship class. *British Journal of Music Education*, 34(2), 169–188. <https://doi.org/10.1017/S0265051716000498>
- Moldez, C., Crisanto, M. A., Cerdeña, M. G. R., Maranan, D. S., Figueroa, R. (2024). Innovation in education: Developing and assessing gamification in the university of the philippines open university massive open online courses. arXiv:2409.03309 [cs.CY]. <https://doi.org/10.48550/arXiv.2409.03309>
- Music Pedagogy Resource. (2021). *Advancing Music Teaching*.
- Nacario, F. R. M. (2017). ESL students' learning styles and language learning strategies in relation to academic performance: Bases for an ESL teaching framework [Unpublished doctoral dissertation]. Philippine Normal University.
- Ng, D. T. K., Ng, E. H. L., & Chu, S. K. W. (2022). Engaging students in creative music making with musical instrument application in an online flipped classroom. *Education and Information Technologies*, 27, 45–64. <https://doi.org/10.1007/s10639-021-10669-5>

- Perignat, E., & Katz-Buonincontro, J. (2018). STEAM in practice and research: An integrative literature review. *Elsevier BV*, 31, 31-43. <https://doi.org/10.1016/j.tsc.2018.10.002>
- Pescasio, M. P. (2023). Embracing diversity: Rethinking inclusive education at de la salle college of saint benilde. *International journal of higher education pedagogies*, 4(4). <https://doi.org/10.33422/ijhep.v4i4.582>
- Pivac, D., Runjić, T., & Bilić Prčić, A. (2017). The art experience of a blind person. *Hrvatska revija za rehabilitacijska istraživanja*, 53(1), 85-92. <https://hrcak.srce.hr/193748>
- Ponsaran, B. A. (2024). Pedagogical approaches for technology integration in performance tasks in Music, Arts, Physical Education, and Health (MAPEH) *PANTAO:International journal of the humanities and social sciences*, 3(2). <https://pantaojournal.com/wp-content/uploads/2024/05/15-Ponsaran.pdf>
- Quintero, J., Baldiris, S., García, R. R., et al. (2019). Augmented Reality in Educational Inclusion. A Systematic Review on the Last Decade. *Frontiers Media*, 10.
- Rinto, W. (2019, January 1). Learning Video Media as a Final Project of Education Arts of Education Students at FSP ISI Denpasar. <https://doi.org/10.2991/icade-18.2019.72>
- Santelli, J., Rosenfeld, W. D., DuRant, R. H., et al. (1995). Guidelines for Adolescent Health Research. *Elsevier BV*, 17(5), 270-276. [https://doi.org/10.1016/1054-139x\(95\)00181-q](https://doi.org/10.1016/1054-139x(95)00181-q)
- Santos, K. J. R., Natividad, L. R. (2023). Inclusivity in education: Assessing the role of special interest programs for gifted and talented students. *Lukad: An online journal of pedagogy*, 3(2): 81-98.
- SHIFT eLearning. (2023, January 28). *Learner-centered e-Learning Design: 4 Steps to Get There*.
- Simply Psychology. (n.d.). Kolb's learning styles. Simply Psychology. Retrieved March 6, 2025, from <https://www.simplypsychology.org/learning-kolb.html>
- Stavrou, N. E. (2024). Embracing diversity through differentiated instruction in music education. *Frontiers in Education*, 9, Article 1501354. <https://doi.org/10.3389/feduc.2024.1501354>
- Tabuena, A. C., Hilario, Y. M. C., & Buenaflor, M. P. (2021, January 1). Overview and Exemplar Components of the Research Methodology on the Research Writing Process for Senior High School Students. *RELX Group (Netherlands)*.
- Tabuena, A. C., Morales, G. S., Perez, M. L. A. C. (2021). Music assessment techniques for evaluating the students' musical learning and performance in the philippine k-12 basic education curriculum. *Harmonia: Journal of Arts Research and Education*, 21 (2) (2021): 192-203. <http://dx.doi.org/10.15294/harmonia.v21i2.32872>
- Wong, J. T., Alcantara, E. R., & Marabe, J. J. A. (2015). Innovation in inclusive education: Comprehensive programs for the gifted and talented in the Philippines. *Proceedings of International Conference on Special Education*, 1(1). <https://publication.seameosen.edu.my/index.php/icse/article/view/95>



Woolf, B. P., & Hall, W. (1995). Multimedia pedagogues: interactive systems for teaching and learning. *IEEE Computer Society*, 28(5), 74-80

Zamora, D. N. B., Deloy, E. D. A. (2022). Teaching music to elementary learners in the new normal: Standpoints of parents and teachers. *IJRP*, 110(1): 479-536. DOI: 10.47119/IJRP10011011020223990