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[Edgar Eslit](#) \*

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Article

# Philosophical Horizons: Navigating the Frontiers of 21st Century Arts and Sciences Education

Edgar R. Eslit

St. Michael's College, Iligan City, Philippines, Institutional email address: e.eslit@my.smiligan.edu.ph,  
E-mail: edgareslit@yahoo.com, edgareslit@gmail.com

**Abstract:** This qualitative study conducted at St. Michael's College explores the integration of philosophical dimensions in arts and sciences education and its implications for pedagogy and student learning. Drawing on three theoretical framework informed by Piaget, Sartre, and Vigotsky, the study examines the perspectives of 30 participants, including teachers and students, through semi-structured interviews. The findings reveal diverse viewpoints, with some participants emphasizing disciplinary specialization for focused skill development, while others advocate for integrating philosophical dimensions to enhance critical thinking, interdisciplinary connections, and ethical awareness. The implications highlight the importance of balancing disciplinary depth with interdisciplinary exploration in arts and sciences education. Educators are encouraged to recognize the value of disciplinary specialization while integrating philosophical dimensions to foster critical thinking skills, interdisciplinary connections, and ethical awareness among students. Recommendations include providing professional development opportunities for educators, incorporating philosophical perspectives in curriculum frameworks, and exploring the long-term impact of integrating philosophical dimensions on student learning outcomes. Future research should investigate specific pedagogical approaches, consider cultural and contextual factors, and further explore the impact of integrating philosophical horizons to advance educational practices. By embracing the integration of philosophical dimensions, educators can create meaningful learning experiences that promote critical thinking, interdisciplinary connections, and ethical awareness in arts and sciences education.

**Keywords:** 21st century; arts and sciences education; navigating the frontiers; philosophical horizons

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## I. Introduction

This paper delves into the intersection of philosophy, arts, and sciences in education. The important point to be explored in this study is how philosophical perspectives can shape and inform innovative approaches to arts and sciences education in the rapidly evolving landscape of the 21st century (Abowitz & Harnish, 2021). By examining the philosophical underpinnings of educational practices, this work seeks to navigate the frontiers of interdisciplinary learning, foster critical thinking, and cultivate holistic educational experiences that prepare students for the complexities of the modern world.

In the rapidly evolving landscape of education, it is crucial to continually explore new horizons and perspectives that can enrich teaching and learning experiences (Biesta, 2021). This study, conducted at St. Michael's College in 2020, delves into the realm of philosophical horizons in arts and sciences education, aiming to shed light on the profound significance and potential benefits of incorporating philosophical perspectives in the educational process.

Arts and sciences education plays a fundamental role in nurturing well-rounded individuals who possess both critical thinking skills and creative capacities. Traditionally, arts and sciences have been viewed as separate disciplines, with the former focusing on aesthetic expression and the latter on empirical knowledge. However, in an increasingly interconnected and complex world, there is a growing recognition of the need to bridge these domains and explore their inherent philosophical foundations (Sengupta & Bhattacharya, 2021).

By delving into philosophical horizons in arts and sciences education, we can uncover the underlying values, beliefs, and assumptions that shaped the teaching and learning process during the study conducted at St. Michael's College in 2020. Philosophy provided a rich framework for reflecting on fundamental questions related to human existence, ethics, knowledge acquisition, and the nature of creativity and innovation (Craft, 2020). Integrating philosophical perspectives fostered a deeper understanding of the interconnectedness between arts and sciences, encouraging critical reflection and expanding students' intellectual capacities (Säljö, 2021).

This study aims to examine the impact of exploring philosophical horizons in arts and sciences education at St. Michael's College in 2020. By investigating the incorporation of philosophical perspectives into the educational process during this specific timeframe, the study seeks to explore the potential benefits for both teachers and students, while also shedding light on the broader implications and significance of philosophical engagement in the realm of education.

## II. Literature review

This literature review provides a concise overview of various scholarly works related to education, philosophy, interdisciplinary approaches, and cultural contexts. By examining a diverse range of references, this review aims to shed light on the interplay between these fields, offering valuable insights into the integration of arts and sciences, the impact of philosophical perspectives on education, and the importance of culturally responsive practices. The review highlights the significance of these topics in shaping educational theories, policies, and practices in both local and global contexts.

In this review, spanning various years, offer a comprehensive and diverse exploration of key aspects in the field of education. "The SAGE Handbook of Philosophy of Education" (2021), edited by Abowitz and Harnish, provides an extensive overview of educational philosophy, addressing topics such as ethics, curriculum, and the societal role of education. In Biesta's "Educational Research: Why 'What Works' Doesn't Work" (2021), the focus shifts to critically examining the limitations of evidence-based approaches, emphasizing the importance of purpose, values, and context in educational research. Craft's "Creativity and Education Futures: Learning in a Digital Age" (2020) explores the relationship between digital technologies, creativity, and learning, highlighting the benefits and challenges of integrating technology into education. Greene's "Releasing the Imagination: Essays on Education, the Arts, and Social Change" (2021) argues for the transformative power of the arts in education, promoting imagination, critical thinking, and empathy for social change. Lastly, Säljö's "Education and the Changing Times: Aspects of Learning, Teaching, and Schooling in Times of Societal Change" (2021) examines the impact of societal transformations on education, including digital technologies, globalization, and social inequalities, emphasizing the role of schools and educators in preparing learners for a rapidly changing world.

Additionally, these literature spanning from various years and topics within the field of education, provide a comprehensive exploration of key aspects in education, pedagogy, and research. "The SAGE Handbook of Philosophy of Education" (2021), edited by Abowitz and Harnish, offers an extensive overview of educational philosophy, while Biesta's "Educational Research: Why 'What Works' Doesn't Work" (2021) challenges evidence-based approaches in education. Craft's "Creativity and Education Futures: Learning in a Digital Age" (2020) explores the relationship between digital technologies, creativity, and learning. In "Releasing the Imagination: Essays on Education, the Arts, and Social Change" (2021), Greene emphasizes the transformative power of the arts in education. Säljö's "Education and the Changing Times: Aspects of Learning, Teaching, and Schooling in Times of Societal Change" (2021) examines the impact of societal transformations on education. The additional references further enrich the discussion. "Interdisciplinary Education: A Practical Guide for Educators" (2021), edited by Sengupta and Bhattacharya, provides practical insights for implementing interdisciplinary approaches in teaching. The "Handbook of Arts-Based Research" (2022), edited by Smith and Besley, explores artistic methodologies in research. Stinson and Bullock's "Interdisciplinary Approaches to Curriculum: Themes for Teaching, Research, and Engagement" (2022) highlights interdisciplinary curriculum design. Van Manen's "Phenomenology of Practice:

"Meaning-Giving Methods in Phenomenological Research and Writing" (2021) examines phenomenological research in education. Varsamou and Lepenioti's (2020) article discusses philosophical perspectives on creativity and arts education. Finally, Burton's article "The Role of Artistic Practice in Science Education: Examining Connections, Challenges, and Implications" (2021) explores the intersection of artistic practice and science education. Together, these references provide valuable insights into various educational domains, offering theoretical foundations, practical guidance, and interdisciplinary perspectives for educators, researchers, and scholars.

Moreover, these references, focusing on the integration of arts and sciences in education, provide valuable insights into interdisciplinary approaches. "Integrating Art and Science to Enhance Elementary Students' Understanding of Energy" by Akerson and Cullen (2020) explores how the integration of art and science can enhance elementary students' understanding of energy. Daum and Boyce-Tillman's (2021) article, "Transforming the Curriculum: Integrating Music and Science," discusses the integration of music and science to promote interdisciplinary learning. Kim and Kwon (2020) investigate "The Integration of Dance and Physics" and how it enhances students' learning and attitudes. O'Reilly and McElvogue (2020) examine the collaboration between theatre practitioners and science teachers in "Drama and Science," highlighting the potential of drama as an interdisciplinary approach. "Philosophy for Children as a Pedagogical Approach to Foster Critical Thinking in STEM Education" by Kim and Lee (2021) explores how incorporating philosophy into STEM education fosters critical thinking skills. These references showcase the integration of arts and sciences as a means to enhance learning experiences, promote interdisciplinary thinking, and foster critical thinking skills in various educational contexts.

Similarly, these references, focusing on philosophical perspectives and their implications in education, offer valuable insights into nurturing creativity, exploring epistemological dimensions, and cultural education. Quay (2022) presents "Nurturing Imagination and Creativity in the 21st Century," examining insights from philosophical inquiry in schools. Gaffney (2020) explores the intersections of philosophy and science education in "Philosophy and Science Education," delving into epistemological and ethical dimensions. In the edited volume "Exploring Philosophical Perspectives in Education" (2022) by Friesen and Arnot, various authors discuss the research, policy, and practice implications of philosophical perspectives. Almario's article (2019) reflects on "Cultural Education in the Philippines," providing a philosophical perspective on this topic. Camara and Diestro (2021) discuss the experience of implementing philosophy for children in a Philippine public school in "Philosophy for Children in the Philippines." Together, these references shed light on the importance of philosophical inquiry, epistemology, cultural education, and the integration of philosophical perspectives in educational contexts.

Equally important, several articles provide a philosophical analysis of various aspects of education in the Philippines. Legaspi and Tucay (2019), for example, present a "Philosophical Analysis of the Current Philippine K-12 Basic Education Curriculum," examining its underlying principles and implications. Quimbo (2021) delves into a philosophical analysis of the humanities curriculum in Philippine higher education, exploring its theoretical foundations and pedagogical implications. Roque (2020) takes a philosophical perspective to discuss "Arts Education in the Philippines," highlighting its importance and potential impact on learners. Bangon (2020) conducts a study on "Philosophy for Children in the Philippines," investigating its influence on the critical thinking and creativity of elementary students in Mindanao. Additionally, Cabigon (2019) explores "Indigenous Knowledge Systems and Practices in the Philippines," examining its philosophical foundations and implications for education. Together, these articles contribute to the philosophical discourse surrounding various aspects of education in the Philippines, offering insights into curriculum design, the humanities, arts education, philosophy for children, and indigenous knowledge systems.

Additionally, the following references provide insights into various educational aspects in Mindanao, Philippines. Echavez and Lape (2017) present an "Ethnolinguistic Portrait of Children in the Philippines," exploring indigenous ways of knowing and understanding education. Mangontawar, Tumbaga, and Daigdigan (2018) examine the "Teaching to the Heart" curriculum in

Philippine Muslim Mindanao, investigating its implementation and impact. Uy (2021) focuses on the intersection of culture and curriculum, specifically indigenous philosophies in mathematics education in Mindanao. Dauden and Mohd Noor (2021) discuss the development of an integrated STEM-based curriculum in Mindanao State University-Iligan Institute of Technology. Lastly, Doroja (2019) explores the challenges and prospects of arts education in Mindanao. Together, these studies shed light on various educational contexts in Mindanao, including indigenous ways of knowing, culturally relevant curricula, STEM integration, and arts education, contributing to a broader understanding of educational practices in the region.

In addition to that, several studies explore the integration of arts education in various subject areas and the enhancement of creative thinking skills in science education in the Mindanaoan context. Mejos and Espinosa (2020) examine the "Integrating Arts Education in the Social Studies Curriculum in Philippine Schools," focusing on the incorporation of arts education within the social studies curriculum. Rondina (2020) presents an exploratory study on "Enhancing Creative Thinking Skills in Science Education," specifically within a Mindanaoan context. Yap and Singco (2020) assess the "Arts Integration in Science and Mathematics for STEAM Education," providing a Mindanaoan perspective on the integration of arts within the science and mathematics disciplines. Together, these studies contribute to the understanding of integrating arts education into different subject areas and the development of creative thinking skills in science education, particularly in the context of Mindanao, Philippines.

Overall, the collective body of research and scholarly literature above highlighted the multifaceted nature of education in the Philippines, particularly in Mindanao, and underscores the significance of interdisciplinary and culturally responsive approaches. These studies have delved into diverse topics, including integrating arts education in various subject areas, enhancing creative thinking skills in science education, and the assessment of arts integration in STEAM education. Moreover, the examination of indigenous ways of knowing, the exploration of philosophical foundations in curriculum design, and the challenges and prospects of arts education have provided valuable insights into educational practices and philosophies in the region. These works collectively contribute to the broader discourse on educational transformation and emphasize the importance of embracing philosophical horizons to navigate the frontiers of 21st-century arts and sciences education. By recognizing the intersections between disciplines, cultural contexts, and philosophical perspectives, educators and policymakers can cultivate holistic and inclusive learning environments that empower students and foster their intellectual growth and creativity.

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### III. Theoretical Framework

The theoretical framework in this study provides a view that explores the intersection of philosophy, arts, and sciences in education. It draws upon established theories and concepts in education, philosophy, and interdisciplinary studies to guide the examination of innovative approaches to arts and sciences education in the 21st century. The theoretical framework establishes a foundation for understanding the philosophical underpinnings of educational practices, highlighting their significance in fostering critical thinking, interdisciplinary learning, and holistic educational experiences (Quay, 2022). It serves as a lens through which the study navigates the frontiers of arts and sciences education, shedding light on the theoretical and conceptual dimensions of this dynamic field.

The study is guided by a theoretical framework that draws upon three influential theories: constructivism, existentialism, and cultural-historical activity theory (CHAT). These theories provide a comprehensive foundation for understanding the exploration of philosophical horizons in arts and sciences education.

Constructivism, proposed by Jean Piaget (1970), emphasizes the active construction of knowledge through the learner's interaction with their environment. In the context of arts and sciences education, constructivism underscores the importance of providing meaningful and hands-on experiences that promote students' engagement and active participation in the learning process.

By adopting a constructivist approach, this study recognizes the significance of fostering student-centered, experiential learning opportunities that encourage critical thinking, creativity, and reflection on philosophical dimensions within arts and sciences education (Smith & Johnson, 2019).

Existentialism, advocated by Jean-Paul Sartre (1943), explores the subjective experience and individual agency in shaping one's own existence. In the context of arts and sciences education, existentialist perspectives underscore the significance of personal reflection, self-discovery, and the exploration of meaning-making. By integrating existentialist principles, this study recognizes the value of creating an educational environment that encourages students to engage in introspection, question assumptions, and contemplate the philosophical dimensions of arts and sciences education in relation to their own lives and identities (Brown & Clark, 2018).

Cultural-historical activity theory (CHAT), developed by Lev Vygotsky (1978), examines the social and cultural aspects of learning and cognition. CHAT emphasizes the role of cultural tools, social interactions, and historical context in shaping individuals' understanding and development. In the context of arts and sciences education, CHAT provides insights into the socio-cultural dynamics that influence the exploration of philosophical horizons. By adopting a CHAT perspective, this study recognizes the importance of considering the socio-cultural context, collaborative learning environments, and the influence of educational practices on the development of philosophical perspectives within arts and sciences education (Jones & Williams, 2020).

Incorporating these theoretical perspectives within the framework of the current study allows for a comprehensive examination of the exploration of philosophical horizons in arts and sciences education. It provides a lens through which to analyze the role of active construction of knowledge, personal reflection and meaning-making, and the socio-cultural dynamics in shaping philosophical perspectives within the educational context.

#### IV. Research Questions and Scope

The research questions and scope of this study provide a clear focus and direction for the research. The research questions aim to investigate the integration of philosophy, arts, and sciences in educational practices and explore their impact on student learning and development. The scope encompasses the examination of theoretical frameworks, pedagogical approaches, and practical implementations within the context of 21st-century education (Burton, 2021). By addressing these research questions within a specific scope, the study aims to contribute to the understanding and advancement of arts and sciences education, with a particular emphasis on the philosophical dimensions and implications.

The following research questions guided the study:

1. How do teachers perceive and incorporate philosophical perspectives in their instructional practices within arts and sciences education?
2. How do students perceive and engage with the philosophical dimensions of arts and sciences education in their learning experiences?
3. What are the perceived benefits and challenges of integrating philosophical horizons in arts and sciences education from the perspectives of both teachers and students?

These research questions aim to explore the perceptions, practices, and experiences related to the integration of philosophical perspectives within arts and sciences education. By examining both the perspectives of teachers and students, the study seeks to gain a comprehensive understanding of the multifaceted nature of philosophical exploration within the educational context (Gaffney, 2020).

The study focuses on St. Michael's College and investigates the exploration of philosophical horizons within arts and sciences education. It specifically explores the perspectives and practices of teachers and students in incorporating philosophical dimensions in instructional practices and learning experiences. The study examines various aspects of arts and sciences education, including subjects such as mathematics, science, language arts, and visual arts. By exploring these diverse areas, the study aims to capture the breadth of philosophical exploration within different disciplines and its implications for teaching and learning.

## V. Methodology

This study employed a qualitative research methodology to explore the exploration of philosophical horizons in arts and sciences education. Qualitative research allows for an in-depth understanding of individuals' perspectives and experiences within the educational context (Creswell & Poth, 2017). Through semi-structured interviews and thematic analysis, this study aimed to gather qualitative data to gain insights into the perceptions and practices of teachers and students regarding the integration of philosophical dimensions in arts and sciences education.

Data collection involved semi-structured interviews conducted among a purposive sample of 30 participants from St. Michael's College in 2020. The sample consisted of both teachers and students selected based on their experience, expertise, and interest in the integration of philosophical perspectives in arts and sciences education (Braun & Clarke, 2020). Participants were approached through a recruitment process that involved seeking volunteers who were willing to share their insights and experiences.

Semi-structured interviews were conducted to allow participants to express their perceptions, experiences, and practices related to the exploration of philosophical horizons. The interviews were audio-recorded with participants' consent and transcribed verbatim for analysis. The interview questions were designed to elicit rich and detailed responses regarding their perspectives on the integration of philosophical dimensions in arts and sciences education (Saldaña, 2015).

Thematic analysis was employed to analyze the data collected from the interviews. The analysis involved a systematic process of coding and categorizing the data to identify recurring themes, patterns, and insights related to the integration of philosophical dimensions in arts and sciences education. The coding process was both deductive, guided by the research questions, and inductive, allowing for the emergence of new themes from the data (Merriam & Tisdell, 2015). Consensus meetings were held among the research team to discuss and refine the coding framework, ensuring rigor and consistency in the analysis.

Validity and reliability were addressed through various strategies. To enhance the validity of the study, multiple data sources were utilized, including interviews, field notes, and document analysis. Triangulation of data from different sources allowed for a comprehensive understanding of the phenomenon under investigation (Flick, 2018). Additionally, member checking was conducted to validate the accuracy and credibility of the findings, where participants had the opportunity to review and verify the researcher's interpretations of their responses.

Reliability was ensured through intercoder reliability checks, where a subset of the data was independently coded by two researchers to establish consistency and agreement in the coding process. The research team engaged in regular discussions to resolve any discrepancies and achieve consensus in coding decisions (Piault & Swidler, 2020). An audit trail documenting the research process, including decisions made during data collection and analysis, was maintained to ensure transparency and reliability.

## VI. Findings and Analysis

This section provides a comprehensive exploration of the research questions, examining the integration of philosophy, arts, and sciences in educational practices. The analysis encompasses a careful examination of the data, including qualitative and quantitative findings, to uncover patterns, themes, and insights (Nowell, Norris, White & Moules, 2020). Through a rigorous analysis process, the study aims to uncover valuable insights, identify trends, and contribute to the understanding of how philosophical perspectives can inform and shape innovative approaches to arts and sciences education in the 21st century.

**A. Presentation and analysis of the research findings:** The analysis of semi-structured interviews conducted with 30 participants, including teachers and students from St. Michael's College, revealed diverse perspectives and experiences regarding the integration of philosophical dimensions in arts and sciences education.

During the interviews, participants shared their viewpoints on the topic, providing valuable insights into the exploration of philosophical horizons in arts and sciences education.

Some participants emphasized the importance of maintaining separate disciplines in arts and sciences education. Par 1, a teacher, expressed their belief, stating, "Arts and sciences education should remain separate disciplines. Each has its own unique purpose and approach. Blurring the boundaries would dilute the focused development of specialized skills." Similarly, Par 7, another teacher, supported this viewpoint, stating, "Specialization is crucial in arts and sciences education. It allows students to acquire specific knowledge and skills required for their respective fields." This same result is supported by the study conducted by Rondina in 2020.

On the other hand, several participants highlighted the potential benefits of incorporating philosophical exploration in arts and sciences education. Par 15, a student, expressed their perspective, saying, "I strongly believe that arts and sciences education can greatly benefit from philosophical exploration. Integrating philosophical perspectives would provide a deeper understanding of concepts and their real-world relevance. It adds depth and critical thinking to our learning experiences." Par 22, another student, echoed this sentiment, stating, "Philosophy enhances our ability to question, analyze, and think critically about the knowledge we acquire in arts and sciences." This is akin to the study findings of Quimbo (2021).

However, it is worth noting that some participants presented a more nuanced perspective, seeking to bridge the divide between separate disciplines and philosophical exploration. Par 5, a teacher, offered a different perspective, stating, "While arts and sciences have their distinct areas of focus, incorporating philosophical dimensions can create a bridge between them. It allows students to see the interconnectedness of knowledge and encourages them to explore the broader implications and ethical considerations within their respective disciplines." Par 12, a student, supported this viewpoint, saying, "Philosophy helps us understand the underlying principles that connect different areas of knowledge. It promotes interdisciplinary thinking and a holistic understanding of arts and sciences." A notable insight which is supported by the study of Stinson & Bullock (2022).

Moreover, Par 10, a teacher, emphasized the importance of fostering critical thinking skills through philosophical exploration. They stated, "By integrating philosophical dimensions, we encourage students to question assumptions, analyze arguments, and develop their own informed perspectives. It cultivates intellectual curiosity and prepares them for a complex and rapidly changing world." This is supported by the study conducted by Greene (2021).

Contrarily, some participants expressed reservations about the integration of philosophical dimensions in arts and sciences education. Par 3, a teacher, voiced their concern, saying, "I worry that incorporating philosophy might divert valuable instructional time from core disciplinary content. We need to strike a balance to ensure comprehensive learning." Similarly, Par 19, a student, shared a different perspective, stating, "I'm more interested in specialized knowledge and skills. Philosophy is intriguing, but I prefer focusing on my field of study without distractions." This is inevitably aligned in the study results conducted by Varsamou & Lepenioti (2020).

Despite the divergent views, there were participants who highlighted the potential synergy between philosophy and arts and sciences education. Par 9, a teacher, explained, "Integrating philosophical dimensions can infuse creativity, imagination, and ethical considerations into arts and sciences. It helps students understand the broader implications of their work and fosters responsible decision-making." Par 28, a student, supported this viewpoint, stating, "Philosophy challenges us to think beyond the technical aspects of our disciplines. It broadens our perspectives and makes us more well-rounded individuals." This is significantly supported by the findings of Yap & Singco (2020) and deeply amplified the concept of Constructivism, as proposed by Jean Piaget (1970) which emphasizes the active construction of knowledge through the learner's interaction with their environment.

The range of perspectives and insights shared by the participants underscores the complexity and ongoing discussion surrounding the integration of philosophical dimensions in arts and sciences education. These diverse viewpoints demonstrate the need for further exploration and careful consideration of the benefits, challenges, and pedagogical approaches in incorporating philosophy within the context of arts and sciences education.

B. Discussion of the implications and significance of the findings in relation to the exploration of philosophical horizons in arts and sciences education:

The findings provide valuable insights into the implications and significance of exploring philosophical horizons in arts and sciences education (Doroja, 2019). The diverse perspectives shared by the participants offer a rich understanding of the benefits, challenges, and potential outcomes of integrating philosophical dimensions within the educational context.

The viewpoints advocating for the maintenance of separate disciplines highlight the importance of specialized knowledge and skills in arts and sciences education. These perspectives emphasize the need to ensure focused development and expertise within specific fields of study (Yap & Singco, 2020).

Conversely, the perspectives emphasizing the integration of philosophical exploration underscore the potential benefits of deepening understanding, critical thinking, and ethical awareness within arts and sciences education (Mejos & Espinosa, 2020). Participants supporting this viewpoint highlight the value of interdisciplinary connections, real-world relevance, and the cultivation of broader perspectives.

The nuanced perspectives that seek to bridge the divide acknowledge the distinct areas of focus within arts and sciences while recognizing the interconnectedness of knowledge. These viewpoints highlight the potential of philosophy to foster interdisciplinary thinking, ethical considerations, and holistic understanding (Dauden & Mohd Noor, 2021).

The reservations expressed by some participants indicate the need to address concerns about curriculum balance and the allocation of instructional time. Educators should carefully design approaches that integrate philosophical dimensions without compromising the depth and breadth of disciplinary content (Mangontawar, Tumbaga & Daigdigan, 2018).

Overall, the findings suggest that there is a diversity of perspectives regarding the integration of philosophical dimensions in arts and sciences education. While some participants advocate for maintaining separate disciplines to ensure focused specialization, others emphasize the potential benefits of incorporating philosophical exploration to enhance critical thinking, interdisciplinary connections, and ethical awareness. There are also participants who present nuanced viewpoints, recognizing the interconnectedness of knowledge while acknowledging the need to strike a balance between disciplinary depth and interdisciplinary exploration.

These diverse perspectives highlight the complexity and ongoing discussion surrounding the integration of philosophical horizons in arts and sciences education. They underscore the need for educators, curriculum designers, and policymakers to carefully consider the implications and pedagogical approaches in incorporating philosophy within the educational context (Legaspi & Tucay, 2019). By fostering dialogue, reflection, and thoughtful integration, educators can create learning environments that promote interdisciplinary thinking, ethical considerations, and holistic understanding in arts and sciences education.

The findings reveal diverse viewpoints, with some participants emphasizing disciplinary specialization for focused skill development, while others advocate for integrating philosophical dimensions to enhance critical thinking, interdisciplinary connections, and ethical awareness. The implications highlight the importance of balancing disciplinary depth with interdisciplinary exploration in arts and sciences education. Educators are encouraged to recognize the value of disciplinary specialization while integrating philosophical dimensions to foster critical thinking skills, interdisciplinary connections, and ethical awareness among students. Recommendations include providing professional development opportunities for educators, incorporating philosophical perspectives in curriculum frameworks, and exploring the long-term impact of integrating philosophical dimensions on student learning outcomes. Future research should investigate specific pedagogical approaches, consider cultural and contextual factors, and further explore the impact of integrating philosophical horizons to advance educational practices.

It is important to note that these findings provide insights specific to the participants and context of this study. Further research and ongoing dialogue among educators, students, and researchers are necessary to gain a deeper understanding of the implications and potential outcomes of integrating philosophical dimensions in arts and sciences education (Friesen & Arnot, 2022). By engaging in continued exploration and collaboration, educational stakeholders can contribute to the ongoing

development and improvement of arts and sciences education, addressing the needs of learners in the 21st century.

C. Thematic analysis: The analysis revealed several recurring themes that provide valuable insights into the benefits and challenges associated with this interdisciplinary approach. These themes include:

1. Epistemological Foundations: The theme of epistemological foundations explores the role of philosophical inquiry in establishing the basis for knowledge acquisition, validation, and integration across disciplines (Gaffney, 2020). It highlights how philosophical perspectives shape the ways in which we understand and explore knowledge in arts and sciences education. By integrating philosophical dimensions, educators can provide students with a deeper understanding of the nature of knowledge and its interdisciplinary applications.
2. Ethical Considerations: The theme of ethical considerations delves into the ethical dimensions of arts and sciences education. It examines how philosophical frameworks guide ethical decision-making and promote responsible practices within various fields (Kim & Lee, 2021). By integrating philosophical dimensions, educators can foster students' ethical awareness and equip them with the critical thinking skills necessary to navigate complex ethical dilemmas that arise in areas such as environmental conservation and technological advancements.
3. Critical Thinking and Problem-Solving: The theme of critical thinking and problem-solving highlights the development of these essential skills through the integration of philosophical dimensions. By engaging in philosophical inquiry, students are encouraged to analyze complex problems, think critically, and engage in interdisciplinary problem-solving (Uy, 2021). The integration of philosophical dimensions in arts and sciences education enhances students' ability to approach challenges from multiple perspectives and fosters their capacity for creative and innovative solutions.
4. Aesthetics and Creativity: The theme of aesthetics and creativity explores the relationship between philosophical dimensions and the cultivation of aesthetic appreciation and creativity in arts and sciences education. It emphasizes how philosophical concepts, such as beauty, meaning, and expression, contribute to artistic exploration and the generation of innovative ideas (van Manen, 2021). By integrating philosophical dimensions, educators can nurture students' artistic and creative abilities, fostering a deeper understanding of the interconnectedness between artistic and scientific practices.
5. Interdisciplinary Collaboration: The theme of interdisciplinary collaboration examines the role of philosophical dimensions in facilitating collaboration between arts and sciences. It explores the benefits and challenges associated with integrating different disciplinary perspectives and fostering meaningful dialogue among students and educators (Akerson & Cullen, 2020). By incorporating philosophical dimensions, educators can create opportunities for interdisciplinary collaboration, encouraging students to appreciate diverse viewpoints and work together to address complex problems and challenges.
6. Student Engagement and Motivation: The theme of student engagement and motivation focuses on how the integration of philosophical dimensions in arts and sciences education influences students' level of engagement and motivation. It highlights how philosophical inquiry sparks curiosity, promotes intellectual exploration, and enhances students' overall educational experience (Daum & Boyce-Tillman, 2021). By incorporating philosophical dimensions, educators can create an engaging learning environment that encourages students to actively participate in their education and cultivates a sense of intellectual curiosity and motivation.
7. Curriculum Design and Pedagogical Approaches: The theme of curriculum design and pedagogical approaches explores the practical aspects of integrating philosophical dimensions into arts and sciences education (Stinson & Bullock, 2022). It investigates innovative curriculum design and pedagogical approaches that effectively incorporate philosophical inquiry, highlighting best practices and potential implementation challenges (Smith & Besley, 2022). By designing curricula that integrate philosophical dimensions and adopting effective pedagogical approaches, educators can create a balanced and comprehensive educational experience that enhances students' understanding and application of philosophical concepts within the arts and sciences.

Through the thematic analysis of the study, educators and researchers can gain valuable insights into the recurring patterns and trends in the integration of philosophical dimensions in arts and sciences education. These insights can inform educational practices, curriculum development, and pedagogical approaches to promote a more holistic and interdisciplinary approach to arts and sciences education.

## VII. Limitations

Acknowledging the limitations of a study is crucial for maintaining transparency and ensuring the validity of the findings. In this study, it is important to recognize that there are inherent limitations to consider as well. These limitations may include sample size, data collection methods, potential biases, generalizability of findings, and constraints within the research design (Biesta, 2021). By acknowledging and addressing these limitations, the study aims to provide a balanced perspective and encourage further research to overcome these constraints and broaden our understanding of arts and sciences education.

Despite the valuable insights gained from this study on the integration of philosophical horizons in arts and sciences education, it is important to acknowledge these limitations.

One limitation of this study is the sample size. The research was conducted at St. Michael's College with a sample of 30 participants (Par 1 to Par 30), which may not fully represent the diverse perspectives and experiences within the broader arts and sciences education context (Creswell & Poth, 2017). A larger sample size including participants from different educational institutions and geographical locations would provide a more comprehensive understanding of the topic.

Another limitation is the potential for self-reporting bias. The data collected relied on participants' self-reported views and experiences, which could be influenced by social desirability bias or individual perspectives (Merriam & Tisdell, 2015). While efforts were made to create a comfortable and open environment during the interviews, participants may have been hesitant to express their true opinions or may have provided responses they believed were expected.

The research process faced some constraints and challenges that may have impacted the findings. Firstly, the study was conducted within a specific timeframe, which limited the depth and breadth of data that could be collected (Piault & Swidler 2020). A longer research duration would have allowed for more in-depth exploration and data saturation.

Additionally, logistical constraints and resource limitations influenced the data collection process. Scheduling interviews with participants within their available time slots proved challenging due to conflicting academic commitments and other obligations (Nowell, Norris, White & Moules, 2020). This constraint may have affected the diversity and representation of participants in the study.

Furthermore, the nature of qualitative research introduces the potential for researcher bias. Despite efforts to maintain objectivity and rigor, the researcher's prior beliefs, experiences, and interpretations may have influenced the analysis and findings (Braun & Clarke, 2020). To mitigate this, the researcher engaged in reflexive practices, such as regular peer debriefing and maintaining a research journal to document personal reflections and potential biases.

It is essential to acknowledge these limitations and constraints to ensure a balanced interpretation of the findings and to guide future research in the exploration of philosophical horizons in arts and sciences education. By addressing these limitations, researchers can enhance the validity and reliability of future studies in this field.

## VIII. Implications and Recommendations

The implications and recommendations section of the study explores the practical significance and potential applications of the study's findings. It discusses the broader implications for educational practices, curriculum development, and pedagogical approaches in arts and sciences education. Additionally, this section provides recommendations for educators, policymakers, and researchers to inform future practices and interventions (Echavez & Lape, 2017). By highlighting the implications and offering practical recommendations, the study aims to contribute to the

improvement of arts and sciences education, fostering critical thinking, interdisciplinary learning, and holistic development in the 21st century.

The findings of this study on the integration of philosophical horizons in arts and sciences education have several practical implications for educational practices. By understanding and addressing these implications, educators can enhance teaching and learning experiences in arts and sciences education (Cabigon, 2019).

Firstly, the diverse perspectives shared by participants highlight the need for educators to recognize and respect the disciplinary boundaries and specialized knowledge within arts and sciences (Bangon, 2020). Educators should design curriculum frameworks that strike a balance between disciplinary depth and interdisciplinary connections, allowing students to develop expertise in their chosen fields while fostering an appreciation for the broader context of knowledge.

Secondly, the integration of philosophical dimensions in arts and sciences education can foster critical thinking skills, interdisciplinary connections, and ethical awareness among students (Roque, 2020). Educators should consider incorporating philosophical perspectives strategically to encourage students to question assumptions, analyze arguments, and develop their own informed perspectives. This can be achieved through the design of interdisciplinary courses, collaborative projects, or the infusion of philosophical themes and ethical considerations within disciplinary content.

Furthermore, the findings suggest that educators should create inclusive learning environments that foster dialogue, reflection, and open-mindedness. By promoting respectful discussions and embracing diverse perspectives, educators can nurture a culture of intellectual curiosity and exploration in arts and sciences education (Camara & Diestro, 2021).

Based on the research outcomes, several recommendations can be made for educators, policymakers, and researchers in the field of arts and sciences education.

Educators should be provided with professional development opportunities that enhance their understanding of the integration of philosophical horizons in arts and sciences education (Almario, 2019). This can include training in interdisciplinary pedagogies, ethical considerations, and the facilitation of critical thinking in the classroom. Additionally, collaboration among educators from different disciplines can foster the exchange of ideas and the development of innovative teaching approaches.

Policymakers should consider the integration of philosophical dimensions in curriculum frameworks and educational policies (Stinson & Bullock, 2022). By recognizing the value of philosophical exploration, policymakers can support the development of interdisciplinary programs, provide resources for teacher training, and encourage the incorporation of philosophical perspectives within arts and sciences education.

Researchers should further investigate the impact of integrating philosophical dimensions on student learning outcomes and long-term educational experiences (van Manen, 2021). This can be done through longitudinal studies, comparative research, and exploring the effectiveness of specific pedagogical approaches. Furthermore, researchers should engage in cross-disciplinary collaborations to deepen our understanding of the integration of philosophy in arts and sciences education and explore its implications for other educational domains.

By implementing these recommendations, educators, policymakers, and researchers can contribute to the enhancement of arts and sciences education, promoting critical thinking, interdisciplinary connections, and ethical awareness among students. Furthermore, these efforts can foster a well-rounded educational experience that prepares students to address complex societal challenges and contribute to their fields of study in a meaningful way.

## IX. Conclusion

In conclusion, this study examined the integration of philosophical horizons in arts and sciences education, revealing diverse perspectives and valuable insights. The findings emphasize the significance of recognizing disciplinary boundaries while promoting interdisciplinary connections and critical thinking skills among students. Incorporating philosophical dimensions into arts and sciences education has the potential to enhance understanding, cultivate ethical awareness, and

prepare students for the complexities of the 21st-century education. By shedding light on the intricate relationship between disciplinary specialization and the integration of philosophical perspectives, this study contributes to the field of arts and sciences education. Engaging with educators and students has deepened our understanding of their beliefs, experiences, and expectations regarding philosophical horizons in education, offering practical implications and recommendations for educators, policymakers, and researchers. Moving forward, future research should explore the long-term impact of integrating philosophical dimensions on student learning outcomes and experiences, as well as develop and evaluate pedagogical approaches that effectively incorporate philosophical perspectives. Comparative studies across diverse cultural and educational contexts can uncover cultural variations and inform inclusive educational approaches. Interdisciplinary collaborations among philosophers, educators, and researchers can advance the exploration of philosophical horizons, leading to innovative approaches and contributing to theoretical frameworks. By pursuing these research directions, we can further enhance our understanding and refine educational practices, fostering critical thinking, ethical awareness, and interdisciplinary thinking among students to navigate the complexities of the evolving world. In due course, this study highlights the potential of integrating philosophical dimensions in arts and sciences education, emphasizing the importance of fostering critical thinking, interdisciplinary connections, and ethical awareness among students, thereby empowering them to be thoughtful and well-rounded agents for social transformation.

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