



TEACHERS' COMPETENCE AND AWARENESS IN THE INTEGRATION OF GLOBAL ISSUES IN SCIENCE CURRICULUM ON THE STUDENTS' ACADEMIC BEHAVIOR AND PERFORMANCE

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ABSTRACT

The study determined the teachers' competence and awareness in integrating global issues into the Science curriculum and its effect on students' academic behavior and performance. Specifically, this research sought to determine teachers' competence and awareness in integrating global issues in the science curriculum into the academic behavior and performance. This research also sought to determine the significant relationship between teachers' competence and awareness of integrating global issues in the science curriculum and students' academic behavior and performance.

The study used a descriptive design to utilize and analyze the data systematically. It was conducted at San Antonio Integrated National High School, Division of Laguna. The total population utilized in this study was 84 Grade 10 students. A self-made questionnaire was utilized and validated among 3 Science Master teachers.

Findings revealed that the teachers' competence was found to be of "Very Great Extent," while teachers' awareness was also found to be of "Very Great Extent." Likewise, the student's academic behavior was also observed as a "Very Great Extent." However, students' academic performance was interpreted as "Satisfactory". The research revealed a significant relationship between teachers' competence and awareness and students' academic behavior and performance.

Data revealed that teachers' competence and awareness in the integration of global issues into the Science curriculum were found to have a relationship to academic behavior and performance. Thus, signified rejection of null hypotheses. This indicates that higher teacher competence is associated with lower levels of academic behavior. Moreover, students' positive behaviors fosters when teachers possess deep understanding of diverse perspective, pedagogical methods, and alignment with educational goals. Furthermore, teachers' competence and awareness play a role in shaping students' academic performance.

It is recommended that teacher engagement in ongoing professional development be prioritized to stay updated on the latest trends, research, and best practices in integrating global issues into the science curriculum. Teachers should also analyze the factors contributing to students' satisfactory performance and implement targeted strategies to address any gaps or challenges.

KEYWORDS: teachers' competence; awareness; global issues

1. INTRODUCTION

In an increasingly interconnected world, the role of education in shaping the perspectives and understanding of future generations cannot be underestimated. The dynamics of globalization have ushered in an era where the global and the local intersect in intricate ways, demanding a nuanced approach to curriculum and pedagogy. This research delves into the pivotal role of science teachers in public schools located in Kalayaan, Laguna, during the school year 2023 to 2024, as they navigate the complex terrain of integration of global issues in education.

As students are exposed to a plethora of global issues, cultures, and perspectives through the internet and media (Barrot et al., 2021), science educators in public schools in Kalayaan find themselves at the forefront of this challenge. They play a critical role in not only imparting essential knowledge but also in shaping students' critical thinking, problem-solving skills, and environmental consciousness that affects the student's academic behavior and performance.

Kalayaan sub-office, a municipality nestled in the heart of Laguna, Philippines, stands as an emblematic example of

countless communities worldwide facing the dual challenge of preserving local identities and embracing global trends. Historically, public schools in this district have played a significant role in shaping the educational landscape, often with the flexibility to tailor their curricula to meet the needs and aspirations of their students. In the school year 2023 to 2024, these institutions find themselves at a crossroads, grappling with the imperative to balance global issues within the science education framework.

This research endeavored incorporate global issues in their classrooms and determine the competence and awareness of teachers in integration and the support provided to them for the integration of global issues in their teaching strategies. By examining the experiences and perspectives of these educators, this study aimed to contribute valuable insights to the broader discourse on curriculum development, pedagogy, and educational policy in the context of globalization.

1.1 Statement of the Problem

Specifically, this study answered the following sub-problems:



1. What is the level of teachers' competence in the integration of global issues in the Science curriculum in terms of:
 - 1.1 Teaching perspective;
 - 1.2 Formative assessment;
 - 1.3 Utilization of learning resource materials;
 and
 - 1.4 Classroom management practices?
2. What is the level of teachers' awareness in the integration of global issues in the Science curriculum in terms of:
 - 2.1 Content knowledge;
 - 2.2 Pedagogical knowledge;
 - 2.3 Awareness of diverse perspectives; and
 - 2.4 Alignment with educational goals?
3. What is the level of student's academic behavior in terms of:
 - 3.1 Interest in the subject;
 - 3.2 Class Participation;
 - 3.3 Self-motivation;
 - 3.4 Class Conduct; and
 - 3.5 Task Completion?
4. What is the student's academic performance level regarding second quarter grades?
5. Is there a significant relationship between the teacher's competence in the integration of global issues in science curriculum and students' academic behavior?
6. Is there a significant relationship between the teacher's awareness of the integration of global issues in the science curriculum and students' academic behavior?
7. Is there a significant relationship between teachers' competence and awareness in the integration of global issues in the science curriculum and students' academic performance?

realize the objective set forth, observation was done with scrutiny of the population parameter for the acquisition of data, and thus make a careful record of what has been observed previously for ensuring the validity of the findings made so that reliable and accurate conclusions may be drawn from them relative to the attendant problem posited in advance. In the usual case, this must be done as a research mandate upon the researcher so that his entire research effort will not be jeopardized.

3. RESULTS AND DISCUSSION

This chapter enumerates the different results and discusses the results yielded from treating the data gathered in this study. The following tabular presentations and discussions will further characterize the teachers' competence and awareness in integrating global issues to develop students' academic behavior and performance.

Understanding teachers' proficiency in integrating global issues into the science curriculum is crucial for fostering a well-rounded education that prepares students to engage with the complexities of the interconnected world.

Level of Teacher's Competence in the Integration of Global Issues in Science Curriculum

The following tables revealed the level of teachers' competence in integrating global issues into the Science curriculum in terms of teaching perspective, formative assessment, utilization of learning resource materials, and classroom management practices.

One key aspect of this integration is the utilization of effective teaching strategies and teachers' perspective that facilitate students' understanding of global issues within the context of scientific concepts.

Table 1 examines the level of teachers' competence, specifically in terms of teaching strategies employed to integrate global issues into the science curriculum. It also provides insights into the effectiveness of instructional methods in promoting global issues integration, global awareness, and interdisciplinary learning.

2. METHODOLOGY

The study is descriptive in design due to the essence of its basic structure in dealing with a situation that demands the technique of observation as the principal means of collecting data. To

Table 1

Level of Teacher's Competence in the Integration of Global Issues in Science Curriculum in terms of Teaching Perspective

| STATEMENTS | MEAN | SD | REMARKS |
|---|------|------|----------------|
| <i>The teacher...</i> | | | |
| 1. provide clear and understandable instructions when integrating global issues into science lessons. | 5.00 | 0.00 | Strongly Agree |
| 2. effectively engage students in discussions and activities related to global issues during science classes. | 5.00 | 0.00 | Strongly Agree |
| 3. is flexible and can adjust teaching methods to suit the integration of global issues into the science curriculum. | 4.60 | 0.55 | Strongly Agree |
| 4. can connect global issues to scientific concepts, making the lessons relevant to students. | 4.20 | 0.84 | Agree |
| 5. can communicate complex global issues in a way that is comprehensible and engaging to students. | 4.60 | 0.89 | Strongly Agree |
| 6. can effectively adapt their teaching methods to cater to the diverse learning needs of students, taking into account individual differences and preferences. | 4.60 | 0.89 | Strongly Agree |



| | | | |
|--|------|------|-------------------|
| <i>7. can be able to incorporate real-world examples and practical applications when teaching science concepts and global issues to make the content more relevant to students' lives.</i> | 4.80 | 0.45 | Strongly Agree |
| Weighted Mean | | 4.69 | |
| SD | | 0.33 | |
| Verbal Interpretation | | | Very Great Extent |

Table 1 illustrates the level of teachers' competence in integrating global issues in the science curriculum in terms of teaching perspective. The teachers' level of competence in integrating global issues obtained a very great extent (M=4.69, SD=0.33), which showed that teachers were highly competent in incorporating global issues into their science teaching. This high competence level ensures that students are effectively engaged and that global issues are integrated into lessons in a way that is relevant and understandable.

The table showed evident results that teachers strongly agree (M=5.00, SD=0.00) that they provide clear and understandable instructions when integrating global issues into science lessons and effectively engage students in discussions and activities related to global issues during science classes. This indicates that teachers ensure their instructions are clear and that their methods effectively engage students, thereby enhancing the integration of global issues into the science curriculum.

Moreover, teachers agree (M=4.20, SD=0.84) that they can connect global issues to scientific concepts, making the lessons relevant to students. Teachers recognize the importance of

relating global issues to scientific concepts and often practice this integration to enhance the relevance of their lessons, although there is some variability in their effectiveness and confidence in this area.

It implies that teachers demonstrate exceptional competence in integrating global issues into the Science curriculum from a teaching perspective. Specifically, they excel in providing clear instructions, engaging students in discussions and activities, adapting teaching methods to suit global issue integration, connecting global issues to scientific concepts, communicating complex topics effectively, catering to diverse learning needs, and incorporating real-world examples. In addition, teachers possess the necessary skills and abilities to effectively incorporate global issues into Science lessons, fostering student understanding, engagement, and relevance of the curriculum to their lives.

Table 2 examines the level of teachers' competence specifically in terms of formative assessment employed to integrate global issues into the Science curriculum.

Table 2

Level of Teacher's Competence in the Integration of Global Issues in Science Curriculum in terms of Formative Assessment

| STATEMENTS | MEAN | SD | REMARKS |
|--|------|------|-------------------|
| <i>The teacher...</i> | | | |
| <i>1. regularly use formative assessments such as quizzes, class discussions, and feedback to monitor students' understanding of science concepts.</i> | 4.40 | 0.55 | Strongly Agree |
| <i>2. provide timely and constructive feedback to help students understand their strengths and weaknesses in science, which aids in their learning.</i> | 4.40 | 0.55 | Strongly Agree |
| <i>3. set clear learning objectives for students and uses formative assessments to check if these objectives are met.</i> | 5.00 | 0.00 | Strongly Agree |
| <i>4. actively involve students in the formative assessment process, encouraging self-assessment and peer-assessment activities.</i> | 4.80 | 0.45 | Strongly Agree |
| <i>5. use the results of formative assessments to adjust teaching methods and strategies to better meet the learning needs of students.</i> | 4.40 | 0.55 | Strongly Agree |
| <i>6. effectively use formative assessment techniques to monitor student progress and provide feedback</i> | 4.40 | 0.55 | Strongly Agree |
| <i>7. use the information gathered from formative assessments to adapt instruction and tailor lessons to address specific learning needs of individual students or the class as a whole.</i> | 4.40 | 0.55 | Strongly Agree |
| Weighted Mean | | 4.54 | |
| SD | | 0.36 | |
| Verbal Interpretation | | | Very Great Extent |

Table 2 illustrates the level of teachers' competence in the integration of global issues in the science curriculum in terms of formative assessment. The teachers' level of competence in integrating global issues obtained a very great extent (M=4.54,

SD=0.36), which showed that teachers were highly competent in using formative assessments to enhance student understanding and address learning needs effectively.



The table showed evident results that teachers strongly agree (M=5.00, SD=0.00) that they set clear learning objectives for students and use formative assessments to check if these objectives are met. This indicates that teachers ensure their learning objectives are clear and that formative assessments are used to verify the attainment of these objectives, thus aligning their teaching methods to support student learning effectively.

Moreover, teachers strongly agree (M=4.40, SD=0.55) that they regularly use formative assessments such as quizzes, class discussions, and feedback to monitor students' understanding of science concepts. Teachers often practice using these assessments to track student progress and provide additional support, thereby helping students understand their strengths and weaknesses and adapt teaching strategies to meet their learning needs.

It implies that teachers demonstrate a strong commitment to using various formative assessment methods, such as quizzes, class discussions, and feedback, to continuously monitor students' understanding of science concepts. Moreover, they excel in providing timely and constructive feedback to help students recognize their strengths and weaknesses, thereby enhancing their learning process. Additionally, teachers effectively set clear learning objectives and actively engage students in the formative assessment process, encouraging self-assessment and peer-assessment activities.

Table 3 observes the level of teachers' competence specifically in terms of formative assessment employed to integrate global issues into the Science curriculum.

Table 3
Level of Teacher's Competence in the Integration of Global Issues in Science Curriculum in terms of Utilization of Learning Resource Material

| STATEMENTS | MEAN | SD | REMARKS |
|--|------|-------------------|----------------|
| <i>The teacher...</i> | | | |
| 1. organize and present learning resources in a structured manner, making it easier for students to grasp the connection between science curriculum and global issues. | 5.00 | 0.00 | Strongly Agree |
| 2. effectively integrate technology, such as online databases and educational websites, to facilitate students' access to global issues-related learning resources. | 5.00 | 0.00 | Strongly Agree |
| 3. promote active learning by encouraging students to utilize learning resources independently for research and inquiry into global issues. | 4.60 | 0.55 | Strongly Agree |
| 4. choose learning resources which are relevant and up-to-date, contributing to students' awareness of current global scientific challenges. | 4.40 | 0.55 | Strongly Agree |
| 5. provide easy access to the learning resources provided by the teacher to support their exploration of global issues in science. | 4.60 | 0.55 | Strongly Agree |
| 6. employ a variety of learning resources, such as multimedia, scientific articles, and case studies, to enhance students' understanding of global issues in science. | 5.00 | 0.00 | Strongly Agree |
| 7. aligned the learning materials with global issues and help students understand the real-world relevance of science concepts. | 5.00 | 0.00 | Strongly Agree |
| Weighted Mean | | 4.80 | |
| SD | | 0.22 | |
| Verbal Interpretation | | Very Great Extent | |

Table 4 illustrates the level of teachers' competence in the integration of global issues in the science curriculum in terms of utilization of learning resource materials. The teachers' level of competence in integrating global issues obtained a very great extent (M=4.80, SD=0.22), indicating that teachers were highly proficient in using various learning resources to enhance student understanding of global issues in science.

The table showed evident results that teachers strongly agree (M=5.00, SD=0.00) that they organize and present learning resources in a structured manner, effectively integrate technology, employ a variety of learning resources, and align the materials with global issues. This indicates that teachers ensure the learning resources are well-organized, up-to-date, and relevant, thereby facilitating students' understanding of the

connection between the science curriculum and global issues and emphasizing the real-world relevance of science concepts.

Moreover, teachers strongly agree (M=4.40, SD=0.55) that they choose learning resources which are relevant and up-to-date, contributing to students' awareness of current global scientific challenges. Teachers often practice selecting appropriate and contemporary materials to ensure that students are informed about ongoing global issues, which enhances the relevance and impact of the science curriculum.

It implies that the teachers demonstrate exceptional proficiency in organizing and presenting learning resources in a structured manner, facilitating students' understanding of the connection between the science curriculum and global issues. Moreover,



they effectively leverage technology, such as online databases and educational websites, to enhance students' access to relevant global issues-related materials. Additionally, teachers promote active learning by encouraging students to independently utilize learning resources for research and inquiry into global issues, thereby fostering critical thinking and exploration. Furthermore, they select learning resources that are both relevant and up-to-date, contributing to students' awareness of current global scientific challenges. By providing easy access to a variety of learning materials, including multimedia, scientific articles, and case studies, teachers enhance students' understanding of global issues in science and align learning materials with real-world relevance, thereby

enriching the learning experience. This high level of teacher competence in utilizing learning resource materials underscores their commitment to promoting student engagement and understanding of global issues within the Science curriculum.

Level of Teacher's Competence in the Integration of Global Issues in Science Curriculum in Terms of Classroom Management Practices

Table 4 presents an evaluation of the level of teachers' competence in integrating global issues into the science curriculum, specifically focusing on classroom management practices.

Table 4
Level of Teacher's Competence in the Integration of Global Issues in Science Curriculum in terms of Classroom Management Practices

| STATEMENTS | MEAN | SD | REMARKS |
|---|------|------|-------------------|
| <i>The teacher...</i> | | | |
| 1. encourage students to think critically and express their opinions on global scientific issues, promoting analytical skills. | 4.20 | 0.45 | Agree |
| 2. adapt classroom management strategies to meet the diverse needs of students regarding global scientific topics. | 4.40 | 0.55 | Strongly Agree |
| 3. effectively manage conflicts or differing opinions that may arise during discussions on global scientific issues. | 5.00 | 0.00 | Strongly Agree |
| 4. prepare conducive classroom environment to open discussions about global scientific challenges, fostering a sense of curiosity and exploration among students. | 4.60 | 0.55 | Strongly Agree |
| 5. manage class time efficiently, ensuring that global issues discussions are appropriately integrated into the curriculum. | 4.40 | 0.55 | Strongly Agree |
| 6. actively participate in classroom activities focused on global issues in Science. | 4.60 | 0.55 | Strongly Agree |
| 7. effectively engage students in discussions related to global scientific issues during class. | 5.00 | 0.00 | Strongly Agree |
| Weighted Mean | | 4.60 | |
| SD | | 0.19 | |
| Verbal Interpretation | | | Very Great Extent |

Table 4 illustrates the level of teachers' competence in the integration of global issues in the science curriculum in terms of classroom management practices. The teachers' level of competence in integrating global issues obtained a very great extent (M=4.60, SD=0.19), indicating that teachers were highly proficient in managing the classroom effectively to promote discussions and engagement with global scientific issues.

The table showed evident results that teachers strongly agree (M=5.00, SD=0.00) that they effectively manage conflicts or differing opinions, prepare conducive classroom environments, manage class time efficiently, actively participate in classroom activities, and engage students in discussions related to global scientific issues. This indicates that teachers ensure a positive and supportive classroom atmosphere conducive to discussions about global scientific challenges, fostering curiosity, exploration, and critical thinking among students.

Moreover, teachers strongly agree (M=4.20, SD=0.45) that they promote students to think critically. This indicates that teachers often practice encouragement to the students to promote analytic skills, ensuring that all students are effectively engaged

and express their own opinion in discussions and activities related to global scientific issues.

It implies that that teachers possess the skills and strategies necessary to create a conducive classroom atmosphere where students feel encouraged to think critically and express their opinions on global scientific issues. This promotes the development of analytical skills and cultivates a culture of inquiry and exploration among students. Additionally, the ability of teachers to adapt classroom management strategies to meet the diverse needs of students regarding global scientific topics ensures that all learners are effectively supported in their learning journey. Moreover, the proficiency of teachers in managing conflicts or differing underscores their capacity to facilitate constructive dialogue and maintain a respectful learning environment.

Level of Teacher's Awareness in the Integration of Global Issues in Science Curriculum

The following tables reveals the level of teachers' awareness in the integration of global issues in Science curriculum in terms of content knowledge., pedagogical knowledge, awareness of diverse perspective and alignment with educational goals.



specifically focusing on content knowledge.

Table 5 shows the data of the level of teachers' competence in integrating global issues into the science curriculum,

Table 5

Level of teachers' Awareness in the Integration of Global Issues in Science Curriculum in terms of Content Knowledge

| STATEMENTS | MEAN | SD | REMARKS |
|---|------|-------------------|----------------|
| The teacher... | | | |
| 1. ensure that the integration of global issues aligns with the educational goals and objectives of the Science curriculum. | 5.00 | 0.00 | Strongly Agree |
| 2. understand how cultural and societal contexts influence global scientific challenges presented in the curriculum. | 5.00 | 0.00 | Strongly Agree |
| 3. effectively integrate global issues into the Science curriculum, demonstrating interdisciplinary connections | 4.40 | 0.55 | Strongly Agree |
| 4. have a clear understanding of how global issues cut across multiple scientific disciplines. | 5.00 | 0.00 | Strongly Agree |
| 5. stay updated with current scientific knowledge related to global issues and imparts this knowledge to students. | 5.00 | 0.00 | Strongly Agree |
| 6. effectively use real-world examples to illustrate the connections between global issues and scientific concepts. | 5.00 | 0.00 | Strongly Agree |
| 7. demonstrate a deep understanding of how global issues are relevant to the Science curriculum." | 5.00 | 0.00 | Strongly Agree |
| Weighted Mean | | 4.91 | |
| SD | | 0.08 | |
| Verbal Interpretation | | Very Great Extent | |

Table 5 illustrates the level of teachers' awareness in the integration of global issues in the science curriculum in terms of content knowledge. The teachers' level of awareness obtained a very great extent (M=4.91, SD=0.08), indicating that teachers possessed extensive knowledge and understanding of how to integrate global issues effectively into the science curriculum.

The table showed evident results that teachers strongly agree (M=5.00, SD=0.00) that they ensure the integration of global issues aligns with educational goals and objectives, understand cultural and societal contexts influencing global scientific challenges, have a clear understanding of interdisciplinary connections, stay updated with current scientific knowledge related to global issues, effectively use real-world examples, and demonstrate a deep understanding of the relevance of global issues to the science curriculum. This indicates that

teachers are highly knowledgeable and competent in integrating global issues into the science curriculum, ensuring that students receive comprehensive and relevant education.

Moreover, teachers strongly agree (M=4.40, SD=0.55) that they effectively integrate global issues into the science curriculum, demonstrating interdisciplinary connections. While this aspect received a slightly lower mean, it still indicates a high level of competency among teachers in incorporating interdisciplinary connections into the science curriculum, which is essential for providing students with a holistic understanding of global issues.

Table 6 represents an evaluation of the level of teachers' awareness in the integration of global issues in Science curriculum specifically focusing on pedagogical knowledge.

Table 6

Level of Teacher's Awareness in the Integration of Global Issues in Science Curriculum in terms of Pedagogical Knowledge

| STATEMENTS | MEAN | SD | REMARKS |
|--|------|------|----------------|
| The teacher... | | | |
| 1. ensure that pedagogical approaches align with the specified curriculum objectives when addressing global issues in Science. | 5.00 | 0.00 | Strongly Agree |
| 2. effectively assess and evaluates students' global competency development within the Science curriculum. | 4.60 | 0.55 | Strongly Agree |
| 3. keep students engaged and interested in Science lessons that incorporate global issues. | 4.60 | 0.55 | Strongly Agree |
| 4. successfully integrate a global perspective into Science | 4.80 | 0.45 | Strongly Agree |



lessons and assignments.

5. promote critical thinking and problem-solving skills among students while addressing global issues in Science.

4.60

0.55

Strongly Agree

6. adapt their teaching methods to accommodate diverse learning styles and student needs within the context of global issues.

4.60

0.55

Strongly Agree

7. employ effective teaching strategies when integrating global issues into the Science curriculum.

4.60

0.55

Strongly Agree

Weighted Mean

4.69

SD

0.19

Verbal Interpretation

Very Great Extent

Table 6 depicts the level of teachers' awareness in the integration of global issues in the science curriculum in terms of pedagogical knowledge. The teachers' level of awareness obtained a very great extent (M=4.69, SD=0.19), signifying a strong understanding and proficiency in employing pedagogical strategies to effectively integrate global issues into science teaching.

The table reveals that teachers strongly agree (M=5.00, SD=0.00) that they ensure pedagogical approaches align with specified curriculum objectives, thereby ensuring coherence between teaching methods and educational goals when addressing global issues in science. Additionally, teachers effectively assess and evaluate students' global competency development, promote critical thinking and problem-solving skills, and adapt teaching methods to accommodate diverse learning styles and student needs within the context of global issues.

Moreover, teachers strongly agree (M=4.60, SD=0.55) that they successfully integrate a global perspective into science lessons and assignments, keep students engaged and interested in lessons incorporating global issues, and employ effective teaching strategies for integrating global issues into the science curriculum. These findings underscore teachers' adeptness in utilizing various pedagogical approaches to enhance student learning experiences and ensure the meaningful integration of global issues into science education.

It implies that the teachers' alignment of pedagogical approaches with curriculum objectives ensures that global issues are effectively addressed within the Science curriculum, promoting coherence and relevance in teaching methods. Moreover, their ability to assess and evaluate students' global competency development reflects a commitment to meaningful learning outcomes and continuous improvement in teaching practices. By keeping students engaged and interested in Science lessons incorporating global issues, teachers foster a conducive learning environment that encourages active participation and inquiry-based learning.

Additionally, teachers' successful integration of a global perspective into Science lessons and assignments enriches students' learning experiences, promoting a deeper understanding of real-world challenges and fostering global citizenship. Furthermore, teachers' promotion of critical thinking and problem-solving skills in the context of global issues underscores the importance of developing essential competencies for lifelong learning and active citizenship.

Level of Teacher's Awareness in the Integration of Global Issues in Science Curriculum in Terms of Diverse Perspective

Table 7 showed the level of teacher's awareness in the integration of global issues in Science curriculum in terms of awareness of diverse perspective. The table below also reveal and evaluate the commitment among teachers in promoting global awareness and understanding diverse perspective.

Table 7

Level of Teacher's Awareness in the Integration of Global Issues in Science Curriculum in terms of Awareness of Diverse Perspective

| STATEMENTS | MEAN | SD | REMARKS |
|--|------|------|----------------|
| The teacher... | | | |
| 1. effectively promote global awareness and the understanding of diverse global perspectives among students in Science lessons. | 4.60 | 0.55 | Strongly Agree |
| 2. adapt global issues to the local context and helps students understand their relevance in the community. | 4.60 | 0.55 | Strongly Agree |
| 3. foster an inclusive classroom environment that welcomes students from various backgrounds in the study of global issues in Science. | 4.40 | 0.55 | Strongly Agree |
| 4. encourage students to respect and appreciate diverse viewpoints when discussing global issues in Science. | 4.80 | 0.45 | Strongly Agree |
| 5. effectively integrate multicultural content and perspectives into Science lessons involving global issues. | 4.60 | 0.55 | Strongly Agree |
| 6. demonstrate an awareness of cultural differences and their impact on student learning in the context of global issues. | 4.60 | 0.55 | Strongly Agree |



7. employs inclusive teaching practices that consider diverse cultural and societal perspectives when addressing global issues in Science.

4.20 0.45 Strongly Agree

Weighted Mean

4.54

SD

0.26

Verbal Interpretation

Very Great Extent

Table 7 presents the level of teachers' awareness in the integration of global issues in the science curriculum in terms of awareness of diverse perspectives. The teachers' awareness obtained a very great extent (M=4.54, SD=0.26), indicating a strong understanding and acknowledgment of the importance of diverse perspectives in science education.

The table highlights that teachers strongly agree (M=4.80, SD=0.45) that they encourage students to respect and appreciate diverse viewpoints when discussing global issues in science. This demonstrates teachers' commitment to fostering an inclusive learning environment where diverse perspectives are valued and respected.

Moreover, while teachers strongly agree (M=4.20, SD=0.45) that they employ inclusive teaching practices, it is worth noting that this aspect received a slightly lower mean compared to other statements. However, it still reflects a high level of agreement among teachers regarding their commitment to

incorporating diverse cultural and societal perspectives into science education.

The above results imply a high level of effectiveness and proficiency among teachers in promoting global awareness and understanding diverse perspectives within the Science curriculum. This rating indicates that teachers demonstrate strong competence in various aspects related to integrating multicultural content, fostering an inclusive classroom environment, and promoting respect for diverse viewpoints among students. Consequently, it implies that teachers are adept at adapting global issues to local contexts, effectively incorporating multicultural perspectives into Science lessons, and employing inclusive teaching practices that consider diverse cultural and societal viewpoints.

Table 8 examines teachers' awareness regarding the integration of global issues into the science curriculum, with a focus on alignment with educational goals.

Table 8

Level of Teacher's Awareness in the Integration of Global Issues in Science Curriculum in terms of Alignment with Educational Goals

| STATEMENTS | MEAN | SD | REMARKS |
|---|------|-------------------|----------------|
| <i>The Teacher...</i> | | | |
| 1. adapt the teaching of global issues in Science to ensure alignment with evolving educational goals. | 4.40 | 0.55 | Strongly Agree |
| 2. consistently monitor students' progress in achieving educational goals through the study of global issues in Science. | 4.40 | 0.55 | Strongly Agree |
| 3. approach to teaching global issues in Science is coherent with the curriculum standards and guidelines. | 4.00 | 0.00 | Agree |
| 4. clear about the educational goals they aim to achieve through the integration of global issues in Science. | 4.60 | 0.55 | Strongly Agree |
| 5. ensure that students' understanding of global issues in Science aligns with the desired learning outcomes of the curriculum. | 4.60 | 0.55 | Strongly Agree |
| 6. seamlessly integrate global issues into the Science curriculum to support educational goals. | 4.60 | 0.55 | Strongly Agree |
| 7. effectively align the integration of global issues in Science with the educational goals and objectives of the curriculum. | 4.20 | 0.45 | Agree |
| Weighted Mean | | 4.40 | |
| SD | | 0.17 | |
| Verbal Interpretation | | Very Great Extent | |

Table 8 outlines the level of teachers' awareness in the integration of global issues in the science curriculum concerning alignment with educational goals. The teachers' awareness achieved a very great extent (M=4.40, SD=0.17), indicating a strong understanding and commitment to aligning the integration of global issues with educational objectives.

The table indicates that teachers strongly agree (M=4.60,

SD=0.55) that they are clear about the educational goals they aim to achieve through the integration of global issues in science. This highlights teachers' clarity regarding the intended learning outcomes and their dedication to ensuring that students' understanding of global issues aligns with these goals. Although teachers also agree (M=4.20, SD=0.45) that they effectively align the integration of global issues with educational goals and objectives, it is worth noting that this



aspect received a slightly lower mean compared to other statements. However, it still reflects a high level of agreement among teachers regarding their efforts to ensure coherence between the integration of global issues and curriculum standards and guidelines.

It implies that teachers demonstrate a strong understanding of how to integrate global issues seamlessly into the curriculum, ensuring that they contribute meaningfully to the attainment of educational outcomes and student learning objectives.

Level of Students Academic Behavior

The following tables revealed the level of student’s academic behavior in terms of interest in the subject, class participation, self-motivation, class conduct and task completion.

Table 9 evaluates students' academic behavior specifically in terms of their interest. This assessment aims to gauge the level of engagement and enthusiasm students demonstrate towards their academic pursuits. By analyzing students' interest, educators and policymakers can gain insights into factors that influence student motivation and engagement in learning.

Table 9
Level of Students’ Academic Behavior in terms of Interest

| STATEMENTS | MEAN | SD | REMARKS |
|---|-------------|--------------|----------------|
| 1. The integration of global issues in Science lessons positively affects my attitude towards the subject. | 3.80 | 0.90 | Agree |
| 2. I participate more actively in Science discussions when global issues are part of the curriculum. | 3.93 | 0.80 | Agree |
| 3. Global issues integrated by the teacher make me curious and more inclined to explore Science topics further. | 4.30 | 0.77 | Agree |
| 4. I find the subject matter in Science more relevant and interesting when it connects with global issues. | 4.08 | 0.76 | Agree |
| 5. My interest in Science increases when the teacher incorporates global issues into the curriculum. | 3.90 | 0.82 | Agree |
| 6. Global issues integrated into Science lessons motivate me to engage more actively in the subject. | 3.95 | 0.80 | Agree |
| 7. The integration of global issues in Science by the teacher stimulates my interest in the subject. | 3.91 | 0.83 | Agree |
| Weighted Mean | | 3.98 | |
| SD | | 0.52 | |
| Verbal Interpretation | | Great Extent | |

Table 9 depicts the level of students' academic behavior in terms of interest in science education. The students' academic behavior achieved a great extent (M=3.98, SD=0.52), indicating that teachers were highly proficient in integrating global issues on students' engagement with science concepts.

The table illustrates evident results wherein students strongly agree (M=4.30, SD=0.77) that global issues integrated by the teacher make them curious and more inclined to explore science topics further. This implies that students feel particularly stimulated to delve deeper into science topics when global issues are incorporated into their lessons, demonstrating a heightened level of curiosity and engagement.

Conversely, students also strongly agree (M=3.80, SD=0.90) that the integration of global issues in science lessons positively affects their attitude towards the subject. Although indicating agreement, this suggests a slightly lower impact on students' overall attitude towards science compared to other statements.

Nonetheless, the majority of students still perceive a positive influence on their attitude towards science when global issues are integrated into their lessons.

It implies that students demonstrate a high level of interest in their academic pursuits. It indicates that students are significantly engaged and motivated in their learning activities, showing enthusiasm for the subjects they study. They are likely to actively participate in class discussions, complete assignments diligently, and seek additional opportunities for learning. Moreover, their keen interest in academics may lead to a deeper understanding of the material and better retention of knowledge.

Table 10 examines level of academic behavior in terms of participation in Science class, particularly when global issues are integrated into the curriculum.



Table 10
Level of Students' Academic Behavior in Participation

| STATEMENTS | MEAN | SD | REMARKS |
|---|------|--------------|---------|
| 1. The integration of global issues in Science class has improved my overall involvement and participation in the subject. | 3.93 | 0.81 | Agree |
| 2. I participate more in class discussions related to Science topics when global issues are part of the curriculum. | 3.79 | 0.88 | Agree |
| 3. I ask more questions and make inquiries during Science lessons when global issues are integrated. | 3.79 | 0.87 | Agree |
| 4. I actively engage in collaborative projects related to Science when they involve global issues. | 3.74 | 0.86 | Agree |
| 5. Global issues integrated by the teacher boost my enthusiasm to participate in Science-related tasks. | 3.81 | 0.83 | Agree |
| 6. I am more inclined to participate in class discussions and activities when global issues are integrated into the Science curriculum. | 3.78 | 0.86 | Agree |
| 7. The integration of global issues by the teacher encourages my active participation in Science class. | 3.93 | 0.86 | Agree |
| Weighted Mean | | 3.82 | |
| SD | | 0.56 | |
| Verbal Interpretation | | Great Extent | |

Table 11 illustrated the level of students' academic behavior in terms of participation in science education. The students' academic behavior had achieved a great extent (M=3.82, SD=0.56), indicating that teachers competently integrates global issues on students' engagement and involvement in science concepts.

The table demonstrated evident results wherein students strongly agreed (M=3.93, SD=0.86) that the integration of global issues by the teacher encouraged their active participation in science class. This indicated that students had felt particularly motivated to participate actively when global issues were integrated, reflecting a heightened level of engagement.

Moreover, students also strongly agree (M=3.74, SD=0.86) that they actively engaged in collaborative projects related to science when they involved global issues. While still indicating agreement, this suggested a slightly lower level of participation in collaborative projects compared to other statements.

Nonetheless, the majority of students had perceived a positive influence on their participation in science when global issues were incorporated into their lessons.

It implies that students demonstrate a significant level of involvement and engagement in their Science class, particularly when global issues are integrated into the curriculum. It indicates that students actively participate in class discussions, ask questions, engage in collaborative projects, and demonstrate enthusiasm for Science-related tasks when global issues are incorporated into the lessons. Their heightened involvement reveals that the integration of global issues serves as a catalyst for stimulating student interest and fostering active participation in their academic endeavors.

Table 11 assesses students' academic behavior, focusing on self-motivation. This evaluation aims to measure the degree to which students are intrinsically driven to engage in their academic tasks and pursue learning independently.

Table 11
Level of Students' Academic Behavior in Terms of Self-Motivation

| STATEMENTS | MEAN | SD | REMARKS |
|---|------|------|---------|
| 1. My motivation to excel in Science is higher when global issues are integrated into the curriculum. | 3.85 | 0.85 | Agree |
| 2. The integration of global issues in Science class enhances my intrinsic motivation to study the subject. | 3.86 | 0.81 | Agree |
| 3. I take the initiative to engage in self-directed learning when global issues are included in Science topics. | 3.73 | 0.90 | Agree |
| 4. Global issues integrated in Science lessons inspire me to set academic goals and work towards them. | 3.87 | 0.87 | Agree |
| 5. I am more curious and motivated to explore Science concepts when global issues are part of the curriculum. | 3.76 | 0.87 | Agree |
| 6. Global issues integrated by the teacher motivate me to learn more in Science. | 4.06 | 0.74 | Agree |
| 7. The integration of global issues in Science class increases my motivation in the subject. | 3.87 | 0.88 | Agree |



Weighted Mean 3.86
SD 0.58
Verbal Interpretation Great Extent

Table 11 illustrated the level of students' academic behavior in terms of self-motivation in science education. The students' academic behavior had achieved a great extent (M=3.86, SD=0.58), indicating that teachers notable integrates global issues on students' self-motivation.

The table shows evident results wherein students strongly agree (M=4.06, SD=0.74) that global issues integrated by the teacher had motivated them to learn more in science. This indicated that students had felt particularly inspired to delve deeper into scientific topics when global issues were integrated, demonstrating a heightened level of motivation.

Moreover, students also strongly agree (M=3.73, SD=0.90) that they had taken the initiative to engage in self-directed learning when global issues were included in science topics. This

indicates that students had felt empowered to explore scientific concepts independently, reflecting a strong sense of intrinsic motivation.

It implies that incorporating real-world problems and global challenges into Science lessons not only increases students' interest in the subject but also stimulates their intrinsic motivation to learn. As a result, students are more likely to actively engage in learning activities, take initiative in their studies, and set academic goals, leading to improved learning outcomes and academic performance.

Table 12 illustrates an evaluation of students' academic behavior in terms of their class conduct when global issues are integrated into the Science curriculum.

Table 12
Level of Students' Academic Behavior in Class Conduct

| STATEMENTS | MEAN | SD | REMARKS |
|--|-------------|-----------|----------------|
| 1. I actively participate in respectful and constructive discussions when global issues are integrated into Science lessons. | 3.97 | 0.83 | Agree |
| 2. The integration of global issues positively influences my overall behavior and attentiveness during Science class. | 3.89 | 0.82 | Agree |
| 3. I demonstrate a collaborative and cooperative class conduct when engaging with Science topics that include global issues. | 3.81 | 0.83 | Agree |
| 4. The integration of global issues in the Science curriculum fosters a more focused and disciplined class conduct on my part. | 3.82 | 0.80 | Agree |
| 5. I exhibit a heightened sense of responsibility and accountability in my class conduct when global issues are part of Science discussions. | 3.78 | 0.80 | Agree |
| 6. The inclusion of global issues in Science lessons contributes to a more positive and enthusiastic class atmosphere from my perspective. | 3.91 | 0.83 | Agree |
| 7. My class conduct improves as I actively participate in activities and projects related to global issues integrated into the Science curriculum. | 3.97 | 0.82 | Agree |

Weighted Mean 4.64
SD 0.18
Verbal Interpretation Very Great Extent

Table 12 depicted the level of students' academic behavior in terms of class conduct in science education. The students' academic behavior had garnered a Very great extent (M=4.64, SD=0.18), indicates that teachers integrates global issues on students' conduct in the classroom.

The table presents evident results wherein students strongly agreed (M=3.97, SD=0.83) that they actively participated in respectful and constructive discussions when global issues were integrated into science lessons. This indicated that students had been particularly engaged and collaborative during discussions related to global issues, fostering a positive learning

environment.

Moreover, students also strongly agreed (M=3.78, SD=0.80) that their class conduct improved as they actively participated in activities and projects related to global issues integrated into the science curriculum. This shows that students had demonstrated heightened responsibility and accountability in their conduct, reflecting a great extent of integrating global issues on classroom dynamics.

It implies a significant enhancement in students' conduct when global issues are integrated into Science lessons. It indicates that students actively participate in discussions, demonstrate



collaborative and cooperative behavior, exhibit heightened responsibility and accountability, and contribute to a positive and enthusiastic class atmosphere.

Table 13 illustrate the level student’s academic behavior in task completion in the integration of global issues in Science curriculum

Table 13
Level of Students’ Academic Behavior in Task Completion

| <i>STATEMENTS</i> | <i>MEAN</i> | <i>SD</i> | <i>REMARKS</i> |
|---|-------------|--------------|----------------|
| 1. I consistently complete assigned tasks related to global issues in Science class. | 3.98 | 0.81 | Agree |
| 2. The integration of global issues enhances my ability to efficiently complete tasks and assignments in Science. | 3.85 | 0.84 | Agree |
| 3. I take the initiative to independently complete additional tasks and readings when global issues are included in Science topics. | 3.83 | 0.85 | Agree |
| 4. The inclusion of global issues in the Science curriculum motivates me to set and achieve academic goals in task completion. | 3.95 | 0.85 | Agree |
| 5. Global issues integrated into Science lessons positively impact my motivation to excel in completing assignments. | 3.91 | 0.79 | Agree |
| 6. I show a higher level of focus and dedication in task completion when global issues are incorporated into Science discussions. | 3.82 | 0.82 | Agree |
| 7. My task completion in Science class improves as I actively participate in projects and activities related to global issues integrated into the curriculum. | 3.99 | 0.84 | Agree |
| Weighted Mean | | 3.91 | |
| SD | | 0.61 | |
| Verbal Interpretation | | Great Extent | |

Table 13 illustrates the level of students' academic behavior concerning task completion in science education. The students' academic behavior obtained a highly positive rating (M=3.91, SD=0.61), indicating that teachers integrates global issues on students' ability to complete tasks effectively.

implies that students had been diligent in completing tasks associated with global issues, demonstrating a strong commitment to their academic responsibilities.

Moreover, students also strongly agreed (M=3.99, SD=0.84) that their task completion in science class improved as they actively participated in projects and activities related to global issues integrated into the curriculum. This indicated that students had shown a higher level of focus and dedication in completing tasks when global issues were incorporated into science discussions.

It implies that students exhibit a high level of task completion behavior when engaging with Science topics that include global issues. They likely demonstrate enhanced motivation, focus, and commitment to completing tasks related to global issues, leading to more effective learning outcomes.

The table presents evident results wherein students strongly agreed (M=3.85, SD=0.84) that they consistently completed assigned tasks related to global issues in science class. This

Level of Students’ Performance

Table 14 presents an evaluation of the performance of Grade 10 students in the second quarter specifically in the subject of Science. This assessment aims to provide insights into students' academic achievement and proficiency in science during this period.

Table 14
Level of Students’ Performance of Grade 10 in Second Quarter in Science

| <i>Score</i> | <i>F</i> | <i>%</i> | <i>Descriptive Equivalent</i> |
|------------------------------|------------|--------------|-------------------------------|
| 90 - 100 | 58 | 19.86 | Outstanding |
| 85 - 89 | 86 | 29.45 | Very Satisfactory |
| 80 - 84 | 73 | 25.00 | Satisfactory |
| 75 - 79 | 75 | 25.68 | Fairly Satisfactory |
| Below 75 | 0 | 0.00 | Did not meet Expectation |
| Total | 292 | 100 | |
| Weighted Mean | | 84.16 | |
| SD | | 5.55 | |
| Verbal Interpretation | | Satisfactory | |



Table 14 revealed the level of students' performance of Grade 10 in second quarter in science. Out of total number of two hundred and ninety-two respondents "85 to 89" received the highest frequency of eighty-six (86) or 29.45% of the total population with descriptive equivalent of Very Satisfactory. And "75 to 79" got a frequency of seventy-five (75) or 25.68% of the total population with descriptive equivalent of Fairly Satisfactory. While the scores "90 to 100" received the lowest frequency of fifty-eight (58) or 19.86% of the total population with descriptive equivalent of Outstanding.

With a (*Weighted Mean = 84.16, SD = 5.55*) it shows that the level of performance of Grade 10 in second quarter in science has a descriptive equivalent of Satisfactory. The results reveal the distribution of scores among students, highlighting the prevalence of Very Satisfactory and Fairly Satisfactory performances, with an overall assessment indicating a satisfactory level of achievement in their science studies during the specified period.

It implies that, on average, students are meeting the expected standards for their performance in Science during that quarter. "Satisfactory" typically indicates that students have demonstrated a solid understanding of the subject matter and

have performed adequately in assessments, assignments, and examinations. While there may be areas where improvement is possible, overall, their performance is deemed acceptable and meets the established criteria for proficiency in Science at that grade level.

Significant Relationship Between Teachers' Competence in the Integration of Global Issues in Science Curriculum and Students' Academic Behavior

The incorporation of global issues into science curriculum stands as a pivotal approach to nurturing well-rounded students equipped to address the challenges of our interconnected world. This integration not only enriches scientific education but also cultivates critical thinking and problem-solving skills essential for global citizenship. In the educational paradigm lies the competence of teachers in seamlessly integrating global issues into their science lessons. Understanding the profound relationship between teachers' competence in this integration and students' academic behavior is paramount in shaping effective teaching practices and optimizing learning outcomes.

Table 15 presents the significant relationship between teachers' competence in integrating global issues into the science curriculum and students' academic behavior.

Table 15

Significant Relationship between the Teacher's Competence in the Integration of Global Issues in Science Curriculum and Students' Academic Behavior

| Teachers' Competence | | Students' Academic Behavior | | | | |
|---|---------------------|-----------------------------|----------------------|------------------------|----------------------|------------------------|
| | | <i>Interest</i> | <i>Participation</i> | <i>Self-motivation</i> | <i>Class Conduct</i> | <i>Task Completion</i> |
| Teaching Perspectives | Pearson Correlation | -0.124 | -0.053 | -0.088 | -0.093 | -0.077 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |
| Formative Assessment | Pearson Correlation | -0.097 | -0.02 | -0.044 | -0.079 | -0.052 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |
| Utilization of Learning Resource Material | Pearson Correlation | -0.109 | -0.037 | -0.074 | -0.062 | -0.053 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |
| Classroom Management Practices | Pearson Correlation | 0.005 | 0.038 | 0.009 | 0.004 | 0.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |

Table 15 presents the significant relationship between teachers' competence in the integration of global issues in the science curriculum and students' academic behavior across various dimensions: interest, participation, self-motivation, class conduct, and task completion. The analysis is based on Pearson correlation coefficients and their corresponding significance levels.

For teaching perspective, formative assessment, and utilization of learning resource material, there were negative correlations observed with students' academic behavior across all dimensions. These correlations were statistically significant ($p < 0.05$), indicating a relationship between lower teacher competence in these areas and lower levels of interest,



participation, self-motivation, class conduct, and task completion among students. However, it's important to note that the strength of these correlations was very weak, the data reveals that the relationships are not substantial.

Conversely, for classroom management practices, the correlations with students' academic behavior dimensions were mostly positive, although very weak. Again, these correlations were statistically significant ($p < 0.05$), indicating that higher teacher competence in classroom management practices was associated with slightly higher levels of interest, participation, self-motivation, class conduct, and task completion among students. However, the strength of these correlations was minimal.

It implies that the negative correlations between teaching perspectives, formative assessment, utilization of learning resource material, and students' interest, participation, self-motivation, class conduct, and task completion reveals that as teachers' competence in these areas increases, students' academic behavior tends to decrease. This simply means that the importance of teachers' ability to adapt their teaching methods to align with students' needs and preferences, fostering a conducive learning environment.

Significant Relationship Between Teachers' Awareness in the Integration of Global Issues in Science Curriculum and Students' Academic Behavior

Table 16 presents the significant relationship between teachers' awareness in integrating global issues into the science curriculum and students' academic behavior.

Table 16

Significant Relationship between the Teacher's Awareness in the Integration of Global Issues in Science Curriculum and Student's Academic Behavior

| Teachers' Awareness | | Students' Academic Behavior | | | | |
|-----------------------------------|---------------------|-----------------------------|----------------------|------------------------|----------------------|------------------------|
| | | <i>Interest</i> | <i>Participation</i> | <i>Self-motivation</i> | <i>Class Conduct</i> | <i>Task Completion</i> |
| Content Knowledge | Pearson Correlation | -0.105 | -0.033 | -0.055 | -0.089 | -0.062 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |
| Pedagogical Knowledge | Pearson Correlation | 0.052 | 0.064 | 0.099 | 0.045 | 0.07 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |
| Awareness of Diverse Perspectives | Pearson Correlation | 0.066 | 0.097 | 0.101 | 0.063 | 0.091 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |
| Alignment with Educational Goals | Pearson Correlation | 0.117 | 0.096 | 0.113 | 0.091 | 0.085 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 289 | 289 | 289 | 289 | 289 |
| | Analysis | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> | <i>Significant</i> |

Table 16 illustrates the significant relationship between teachers' awareness in the integration of global issues in the science curriculum and students' academic behavior, focusing on dimensions such as interest, participation, self-motivation, class conduct, and task completion. The analysis is based on Pearson correlation coefficients and their corresponding significance levels.

For content knowledge, pedagogical knowledge, awareness of diverse perspectives, and alignment with educational goals, there were correlations observed with students' academic behavior across all dimensions. These correlations were statistically significant ($p < 0.05$), indicating a relationship between higher teacher awareness in these areas and higher levels of interest, participation, self-motivation, class conduct, and task completion among students. However, it's important to note that the strength of these correlations was very weak, the data reveals that the relationships are not substantial.

It implies a strong connection between teachers' awareness in integrating global issues into the science curriculum and students' academic behavior. Teachers who possess a deep understanding of diverse perspectives, pedagogical methods, and alignment with educational goals are better positioned to foster positive behaviors among students. However, areas for improvement are evident, particularly in translating content knowledge into engaging classroom experiences and creating inclusive environments. Strengthening teacher training programs in these areas could lead to more engaging and effective teaching practices, ultimately enhancing student engagement and performance in science education.

Significant Relationship Between Teachers' Competence and Awareness in the Integration of Global Issues in Science Curriculum and Students' Academic Performance

Table 17 presents the significant relationship between teachers' competence and awareness in integrating global issues into the science curriculum and students' academic performance.



Table 17

Significant Relationship between the Teachers' Competence and Awareness in the Integration of Global Issues in Science Curriculum and Students Academic Performance

| | | Students' Academic Performance |
|----------------------|---------------------|--------------------------------|
| Teacher's Competence | Pearson Correlation | 0.036 |
| | Sig. (2-tailed) | .000 |
| | N | 289 |
| | Analysis | <i>Significant</i> |
| Teacher's Awareness | Pearson Correlation | 0.023 |
| | Sig. (2-tailed) | .000 |
| | N | 289 |
| | Analysis | <i>Significant</i> |

Table 17 presents the significant relationship between the teacher's competence and awareness in the integration of global issues in Science curriculum and students' academic performance

The teacher's competence and awareness in the integration of global issues in Science curriculum was observed to have a significant relationship to the students' academic performance. This is based on the computed r values obtained from the tests with very weak relationship. Furthermore, the p-values obtained were less than the significance alpha 0.05, hence there is a significance.

While the correlations are modest, they still indicate that both teacher competence and awareness play a role in shaping students' academic outcomes. It implies that investing in teacher training programs that enhance their competence and awareness regarding global issues integration could lead to improved student performance in science education.

4. CONCLUSION AND RECOMMENDATIONS

Based from the results and findings, the following conclusions are drawn:

Teachers' competence in the integration of global issues in Science curriculum was observed to have a relationship to academic behavior thus signified rejection of null hypothesis. This implies that higher teacher competence is associated with lower levels of academic behavior. It also indicates a potential mismatch between teacher competence and student engagement, highlighting the need for further investigation into in structural strategies that foster positive academic behaviors while maintaining high levels of teacher competence.

Also, there is a significant relationship between the teachers' awareness in the integration of global issues in Science Curriculum and students' academic behavior. Therefore, the null hypothesis is rejected. This indicates that teachers' who deeply understands the diverse perspective, pedagogical methods, and alignment of educational goals foster positive behaviors among the students.

Lastly, there is a significant relationship between the teachers' competence and awareness in the integration of Global Issues in Science Curriculum and students' academic performance. Therefore, the null hypothesis is rejected. This indicates that even minor variations in teacher competence and awareness is associated to students' academic performance, emphasizing the need for continuous professional development and training to enhance teaching practices and curriculum integration.

Based from the findings and conclusions, the following recommendations are made:

1. Teachers may engage in ongoing professional development to stay updated on the latest trends, research, and best practices in integration of global issues into the science curriculum.
2. Teachers may analyze the factors contributing to the satisfactory performance of the students and implement targeted strategies to address any gaps or challenges.
3. Future researchers may conduct qualitative research to investigate deeper into the mechanisms underlying the observed relationships between teachers' competence/awareness and student academic behavior and performance.

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