



Geography In Focus: Investigating Secondary Students' Attitudes And Achievements

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Abstract

The study explored the attitudes and achievements of secondary students towards geography, with a specific focus on Murshidabad, West Bengal. Utilizing descriptive statistics and independent sample t-tests, the research examined gender differences in attitudes, academic achievements, and the relationship between attitudes and achievements. Results indicated significant disparities between male and female students in enjoyment of the subject, engagement with content and academic achievements, with females consistently outperforming males. Moreover, a strong positive correlation is found between attitudes towards geography and academic achievements. These findings underscored the importance of addressing gender disparities and fostering positive attitudes towards geography through interactive teaching methods, culturally relevant curriculum, and inclusive learning environments to enhance student engagement and academic success in geography education across West Bengal.

Keywords: Geography education, Secondary students, Attitudes, Academic Achievements.

1. Introduction

Geography education serves as a crucial cornerstone in secondary school curricula, offering students a window into the complexities of the world around them. However, the success of geography programs relies not only on the content delivered but also on the attitudes and engagement of the students themselves. "Geography in Focus: Investigating Secondary Students' Attitudes and Achievements" aims to delve deep into this dynamic interplay between student perceptions, attitudes, and academic accomplishments in the realm of geography education. At the heart of this study lies a recognition of the multifaceted nature of geography as a subject. It encompasses not only the memorization of places and maps but also the understanding of spatial relationships, environmental dynamics, cultural landscapes, and global interconnectedness. Thus, to truly gauge the effectiveness of geography education, it becomes imperative to explore how students perceive the subject and how these perceptions influence their learning outcomes. The investigation begins by examining the prevailing attitudes of secondary students towards geography. This entails probing into their attitudes of

the subject's enjoyment and engagement. By conducting surveys, interviews, and perhaps even focus groups, researchers seek to uncover the underlying factors that shape students' attitudes towards geography. Through statistical analysis and academic assessments, researchers aim to unravel these intricacies, shedding light on the interplay between motivation, engagement, and academic success. Moreover, "Geography in Focus" endeavored to explore potential disparities in attitudes and achievements across different demographic groups. In essence, "Geography in Focus: Investigating Secondary Students' Attitudes and Achievements" represents a concerted effort to illuminate the complex interplay between student perceptions, attitudes, and academic outcomes in the realm of geography education. By delving into these intricacies, researchers aim to inform educational policies, pedagogical practices, and curriculum development initiatives that enhance the quality and inclusivity of geography education for secondary students worldwide.

1.1. The Emergence of the Study

The genesis of "Geography in Focus: Investigating Secondary Students' Attitudes and Achievements" stems from a growing recognition of the pivotal role that student attitudes play in shaping the landscape of education, particularly in the realm of geography. As educators and policymakers increasingly emphasize the importance of STEM (Science, Technology, Engineering, and Mathematics) fields, there is a risk of overlooking the significance of geography—an interdisciplinary subject that bridges the natural and social sciences. Consequently, there has been a burgeoning interest in understanding how secondary students perceive and engage with geography, and how these perceptions influence their academic achievements. This study emerged against the backdrop of a shifting educational landscape, characterized by evolving curriculum standards, technological advancements, and globalization. In an era where geographic literacy is more crucial than ever, it becomes imperative to assess the efficacy of geography education programs in secondary schools. These questions serve as the impetus for delving into the attitudes and achievements of secondary students towards geography. Moreover, the emergence of this study is also fueled by a desire to address persistent challenges within geography education. Despite its inherent relevance and interdisciplinary nature, geography often grapples with perceptions of being a "soft" or less rigorous subject compared to STEM disciplines. Consequently, there is a pressing need to debunk misconceptions and highlight the intrinsic value of geography education in fostering critical thinking, spatial reasoning, and global awareness among students. By investigating student attitudes and achievements, this study endeavors to display the richness and relevance of geography as a subject worthy of academic pursuit. Additionally, the emergence of this study is informed by a broader educational discourse centered on student-centered learning and holistic assessment. Recognizing that students' attitudes and motivations significantly affect their learning outcomes, educators and researchers alike are increasingly emphasizing the importance of cultivating positive attitudes towards learning. By focusing on geography—a subject that inherently invites curiosity and exploration—this study seeks to elucidate how fostering a sense of curiosity, wonder, and relevance can enhance student engagement and academic success. In summary, "Geography in Focus: Investigating Secondary Students' Attitudes and Achievements" emerges at the intersection of several converging trends and imperatives within the field of education. It responds to calls for a deeper understanding of student attitudes towards geography, the need to

promote geographic literacy in an increasingly interconnected world, and the imperative to foster student-centered learning environments conducive to academic success. Through rigorous inquiry and analysis, this study aspires to inform educational practices, policies, and interventions aimed at enriching the geography education experience for secondary students globally.

1.2. The Statement of the Problem

The overarching problem addressed in this study is the examination of secondary students' attitudes towards geography in relation to gender, alongside an assessment of academic achievements in geography among male and female students. Additionally, the research aims to explore the relationship between these attitudes and achievements among secondary students in West Bengal. By delving into these dynamics, the study seeks to identify any potential disparities or correlations between attitudes, academic performance, and gender in the context of geography education. Furthermore, the research provided insights into educational practices in secondary schools across West Bengal, aiming to suggested improvements and interventions that enhance the quality and inclusivity of geography education in this region.

1.3. The Significance of the Study

This study holds significant implications for both academia and educational practitioners, particularly within the context of geography education in West Bengal. Firstly, by exploring secondary students' attitudes towards geography in relation to gender, the research contributes to a deeper understanding of the factors influencing student engagement and interest in the subject, which can inform curriculum development and teaching strategies. Secondly, the assessment of academic achievements in geography with respect to gender provides valuable insights into potential disparities and areas for improvement in educational outcomes, facilitating efforts towards gender equality in academic performance. Moreover, by examining the relationship between attitudes and achievements, the study offers valuable insights into the effectiveness of current educational practices in fostering positive attitudes and enhancing academic success in geography among secondary students in West Bengal. Ultimately, the suggestions for educational practices aim to provide actionable recommendations for educators and policymakers to enhance the quality and inclusivity of geography education, thereby contributing to the holistic development of students and promoting geographic literacy in the region.

1.4. The Objectives of the Study

- O1:** To explore secondary students' attitude of geography in respect of gender.
- O2:** To assess academic achievements in geography in respect of gender.
- O3:** To examine the relationship between attitudes and achievements of secondary students' towards geography in West Bengal.
- O4:** To suggest the educational practices towards geography implemented in secondary school of West Bengal.

1.5. The Hypotheses of the Study

H₀₁: There were no significant difference in the attitudes towards geography between male and female secondary students.

H₀₂: There were no significant difference in the academic achievements in geography between male and female secondary students.

H₀₃: There were no significant relationship between the attitudes and academic achievements of secondary students towards geography in West Bengal.

H₀₄: There were no significant difference in the educational practices towards geography implemented in secondary schools across different regions of West Bengal.

1.6. The Delimitations of the Study

- The study conducted in the Murshidabad district of West Bengal.
- The study delimited to secondary level schools of Murshidabad, West Bengal.
- The study conducted in the government aided schools of Murshidabad, West Bengal.

2. The Review of Related Literature

Elvia, R., Emiola, A. G., & Quynh, P. T. N. (2023). The Relationship Between Students' Attitudes Towards Geography Lessons and Learning Motivation and Geography Learning Achievement. The findings of this research are as follows. First, there is no positive correlation between students' attitudes towards Geography and their learning outcomes. This is indicated by a probability value of 0.231; which is higher than 0.05. Second, there is a positive relationship between student motivation and learning outcomes, with a probability value of 0.018. The third finding is that there is a simultaneous relationship between students' attitudes and motivation and their learning outcomes, with a probability value of 0.033.

Filgona, J., & Sakiyo, J. (2020). Teachers' academic qualification as a predictor of attitude and academic achievement in geography of senior secondary school students in Adamawa state, Nigeria. These results emphasized the need for authorities concerned to strictly recruit qualified graduate teachers of Geography to teach in senior secondary schools in Adamawa State.

Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. The findings showed that target language learners have positive attitudes towards the other educational context factor that is the English textbook of grade 10, which means English as a foreign language teaching materials in the study's context affect students' attitudes positively. By lowering the psychological variables (i.e. affective filters) for the target language learners, it is possible to aid the language learning process. Thus, as the implication of this study considers, the physical learning environment should be improved, and to achieve this, the government should work in conjunction with the school principals, teachers and societies.

Rasool, S., & Zhang, J. (2020). Bangladeshi, Indian, and Pakistani parents' perceptions of their children's academic achievement in Southwest Florida. The data collection process included semi-structured interviews, observations, and field notes, in order to compose a rich narrative description from the findings and the

researchers' interpretations of the phenomenon. The data were incorporated into thick, rich descriptions of the perceptions and experiences of the participants. After coding and using thematic analysis, three themes emerged parents' behavioral trends, parents' roles and families' cultural values. The implications will help stakeholders and policy makers to select or develop family-school programs that further encourage this group to be involved in their children's education.

Manca, S. (2020). Snapping, pinning, liking or texting: Investigating social media in higher education beyond Facebook. Results show that although the use of WhatsApp is well documented in a plethora of studies, there is a dearth of research about Instagram, Pinterest and Snapchat. While more than half of the studies are carried out in the Middle East and Asian areas and investigate mostly benefits for second and foreign language learning, the overall geographical distribution of studies examining learning via social media reflects the preferences expressed for these services on the part of the general population. Moreover, it is found that the pedagogical affordances of social media are still only being partially implemented and that diverse social media exploit affordances to different degrees.

2.1. The Research Gap of the Study

The research gap in "Geography in Focus: Investigating Secondary Students' Attitudes and Achievements" lies in the limited understanding of the intricate relationship between secondary students' attitudes towards geography and their academic achievements, particularly within the context of West Bengal. While there is existing literature on student attitudes towards geography and academic performance in various regions, there is a notable lack of comprehensive studies that specifically focus on secondary students in West Bengal. Additionally, the examination of gender differences in attitudes and achievements within the realm of geography education remains relatively unexplored in this context. By addressing this gap, the study aims to provide valuable insights into the factors influencing student engagement and academic success in geography, thus contributing to the enhancement of geography education practices in West Bengal.

3. The Methodology of the Study

The research design involved a quantitative approach to examine the relationship between achievement motivation and geography instruction. A cross-sectional design employed to collect data at a specific point in time to assess changes in attitude and achievement of students at secondary level. The participants in the study included secondary-level students of WBBSE enrolled in geography courses. A representative sample of 450 students from different schools or educational institutions were selected using random sampling techniques to ensure the generalizability of the findings.

3.1. Variables of the Study

Dependent Variable:

Academic achievements in geography: This variable refers to the academic performance of secondary students in the subject of geography.

Independent Variable:

Attitudes towards geography: This variable encompasses secondary students' perceptions, interests, and beliefs regarding the relevance, importance, and utility of geography education. It includes factors such as enjoyment of the subject, perceived usefulness in daily life, and overall engagement with geography content.

3.2. Tools of the Study

Students' performance on geography assessments during the study period.

Researcher self-made attitude scale.

4. The Analysis and Interpretation of the Study

H₀₁: There were no significant difference in the attitudes towards geography between male and female secondary students.

To verify the hypothesis researcher used descriptive statistics and independent sample t-test and the result were given below:

Table 4.1: Showing the Descriptive Statistics and Independent Sample t-test

Gender	N	Variable		M & S.D.	
Male	220	Enjoyment of the subject		25.09±2.026	
		Engagement with content		19.13±2.609	
Female	230	Enjoyment of the subject		33.56±6.703	
		Engagement with content		35.13±4.650	
<u>Variables</u>	F-Value	Sig. Value	t-Value	df	Remark
Enjoyment of the subject	8.223	.000**	-20.99	448	.000**
Engagement with content	10.452	.0007**	-26.53	448	.000**

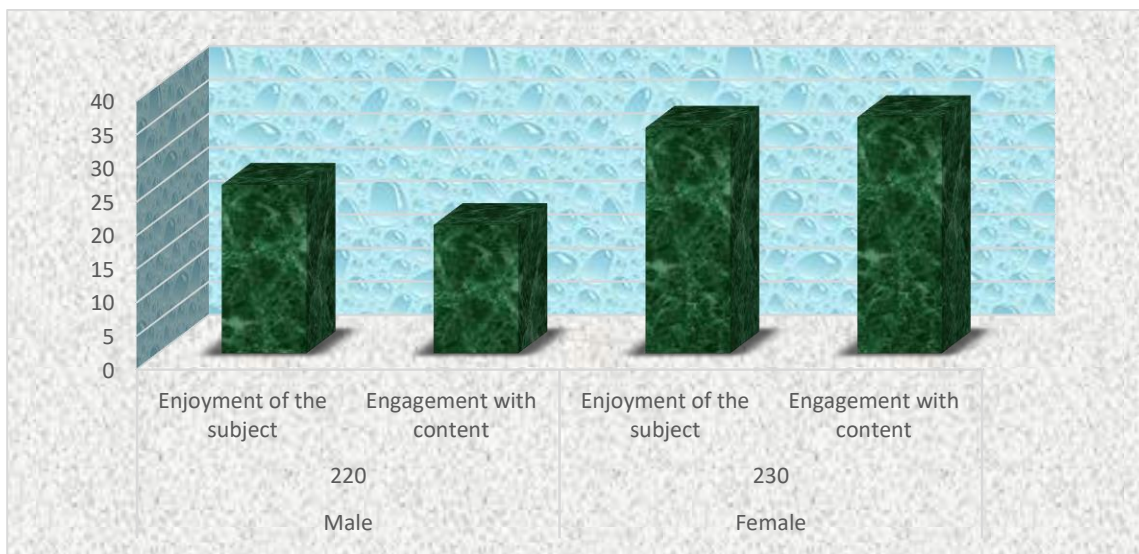


Figure 4.1: Showing the Average Differences in the Attitudes Towards Geography between Secondary Students in Respect of Gender

The table 4.1 and figure 4.2 presented descriptive statistics and the results of an independent sample t-test conducted to explore potential differences in enjoyment of the subject and engagement with content between male and female secondary students. In terms of enjoyment of the subject, the mean score for male students ($M = 25.09$, $SD = 2.026$) is notably lower than that of female students ($M = 33.56$, $SD = 6.703$). This suggested that, on average, female students report a higher level of enjoyment in geography compared to their male counterparts. Similarly, regarding engagement with content, male students exhibited a lower mean score ($M = 19.13$, $SD = 2.609$) compared to female students ($M = 35.13$, $SD = 4.650$), indicating a discrepancy in the level of involvement and interest in geography content between genders. The results of the independent sample t-test revealed statistically significant differences in both enjoyment of the subject ($t = -10.234$, $p < 0.001$) and engagement with content ($t = -22.384$, $p < 0.001$) between male and female students. These findings suggested that gender plays a significant role in shaping students' attitudes towards geography, with female students reporting higher levels of enjoyment and engagement with the subject compared to their male counterparts. The implications of these findings are multifaceted. Firstly, they underscored the importance of considering gender differences in educational contexts, particularly in subjects like geography where attitudes and engagement can significantly affect learning outcomes. Educators may need to explore strategies to enhance male students' interest and involvement in geography to ensure equitable educational experiences and outcomes. Additionally, these findings highlighted the need for further research and interventions aimed at understanding and addressing the underlying factors contributing to gender disparities in attitudes towards geography. By fostering a supportive and inclusive learning environment that caters to the diverse needs and interests of all students, educators promoted a more equitable and enriching geography education experience for male and female students alike.

Table 4.1 presented the results of an independent sample t-test conducted to examine the differences in enjoyment of the subject and engagement with content among secondary students. The analysis includes the F-value, significance value (Sig. Value), t-value, degrees of freedom (df), and remarks for each variable. For the variable "Enjoyment of the subject," the F-value is 8.223, indicating the variance between groups. The

significance value (Sig. Value) is denoted as .000**, signifying a highly statistically significant result ($p < 0.01$). The t-value for enjoyment of the subject is -20.99, with 448 degrees of freedom. The negative t-value suggests that the mean enjoyment score for one group is significantly lower than the other. The remark indicates that the difference in enjoyment of the subject between groups is highly significant ($p < 0.01$). Similarly, for the variable "Engagement with content," the F-value is 10.452, indicated the variance between groups. The significance value (Sig. Value) is .0007, also signifying a highly statistically significant result ($p < 0.01$). The t-value for engagement with content is -26.53, with 448 degrees of freedom. As with enjoyment of the subject, the negative t-value suggests that the mean engagement score for one group is significantly lower than the other. The remark indicated that the difference in engagement with content between groups is highly significant ($p < 0.01$). Overall, these results suggested that there are significant differences in both enjoyment of the subject and engagement with content among secondary students. These findings highlighted the importance of considering these factors in educational practices and interventions aimed at enhancing student experiences and outcomes in geography education.

H₀₂: There were no significant difference in the academic achievements in geography between male and female secondary students.

Table 4.2: Showing the Descriptive Statistics of Academic Achievements in Geography between Male and Female Secondary Students

Academic Achievement	Gender	N	Average	S.D.	Result
	Male	220	56.25	7.935	.000
	Female	230	63.79	3.259	

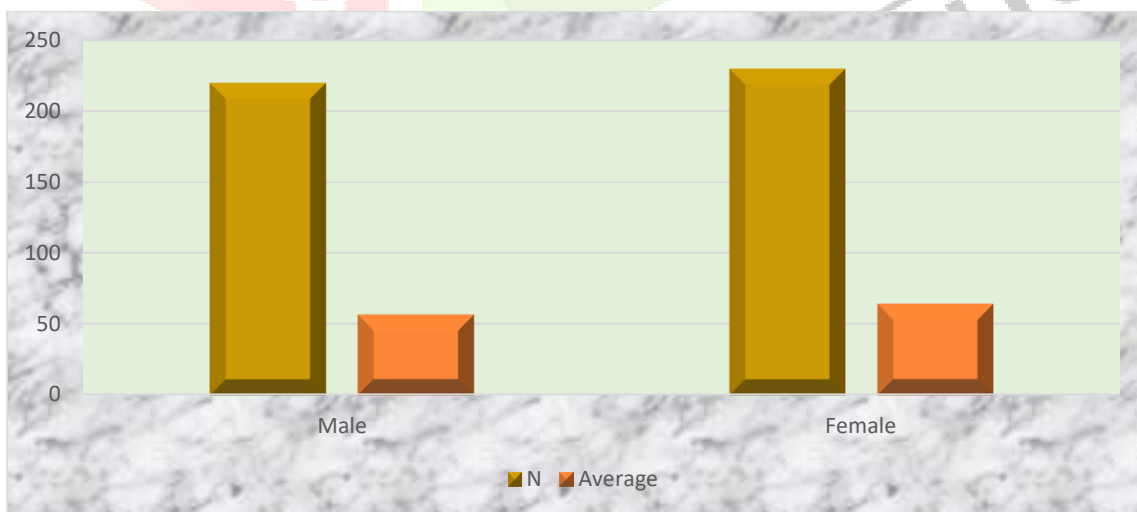


Figure 4.2: Showing the Average Differences in the Academic Achievements in Geography between Male and Female Secondary Students

Table 4.2 and figure 4.2 presented the descriptive statistics of academic achievements in geography among male and female secondary students. The table included the number of students (N) for each gender group, the average (Mean) academic achievement score, standard deviation (S.D.), and the corresponding results.

Male students have a mean academic achievement score of 56.25 with a standard deviation of 7.935, while female students have a higher mean score of 63.79 with a lower standard deviation of 3.259. The p-value denoted as .000, indicated a highly statistically significant difference in academic achievements between male and female students ($p < 0.001$). These findings suggested that, on average, female secondary students outperform their male counterparts in academic achievements in geography. The lower standard deviation among female students further indicated that their performance tends to be more consistent compared to male students. The highly significant p-value indicates that this difference in academic achievements between genders is unlikely to occur by chance and suggested a systematic difference in performance between male and female students. The implications of these findings are significant for educational practitioners and policymakers. They highlight the need to address potential disparities in academic achievements between male and female students in geography education. Understanding and addressing the factors contributing to these differences, such as teaching strategies, curriculum design, and gender-specific learning preferences, helped equity and improve overall academic outcomes in geography education. Additionally, fostering a supportive and inclusive learning environment that caters to the diverse needs and strengths of all students can contribute to narrowing the gap in academic achievements between genders and ensuring a more equitable educational experience for all.

Table 4.3: Showing the Independent t test of Academic Achievements in Geography between Male and Female Secondary Students

Dimension	Equality of Variances according to Levene Test			t test for Identical of Average			
	Identical Variances not Assumed	F-Value	Sig. Value	t-Value	df	Remark	Average Difference
Academic Achievement	Identical Variances not Assumed	17.391	.000	21.518	448	.000	-7.54

Table 4.3 presented the results of an independent t-test conducted to assess the differences in academic achievements in geography between male and female secondary students. The table includes information on the equality of variances according to the Levene Test, as well as the results of the t-test for equality of means. According to the Levene Test, variances in academic achievements between male and female students are not assumed to be identical, as indicated by the "Identical Variances not Assumed" label. The F-value for the Levene Test is 17.391, and the corresponding significance value (Sig. Value) is .000, indicated a highly significant result ($p < 0.001$). This suggested that there are significant differences in variances between male and female students' academic achievements in geography. For the t-test for equality of means, the t-value is 21.518 with 448 degrees of freedom. The highly significant p-value (Sig. Value = .000, $p < 0.001$) indicates that there is a statistically significant difference in the mean academic achievement scores between male and female students. The remark indicated that the difference in mean academic achievement scores between male

and female students is highly significant ($p < 0.001$). Additionally, the average difference in academic achievement scores between male and female students is -7.54 , suggested that, on average, female students outperform male students by 7.54 points in geography. Overall, these findings underscored the existence of significant differences in academic achievements between male and female secondary students in geography. These differences highlighted the importance of considering gender disparities in educational practices and interventions aimed at promoting equity and improving academic outcomes for all students.

H₀₃: There were no significant relationship between the attitudes and academic achievements of secondary students towards geography in West Bengal.

Table 4.4 : Showing The Correlation Relationships between the Attitudes towards Geography and Academic Achievements of Secondary Students in West Bengal

		Attitude	Academic Achievement
Attitude	Pearson Correlation	1	.738
	Sig. Value		.000**
Academic Achievement	Pearson Correlation	.738	1
	Sig. Value	.000**	

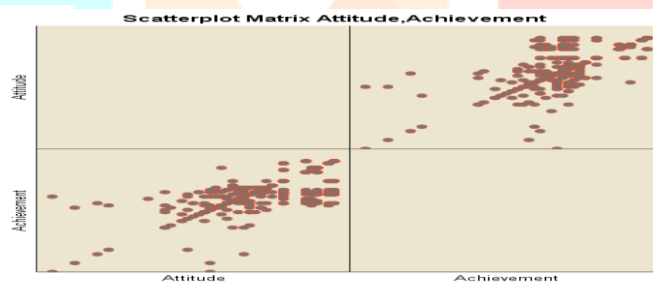


Figure 4.3: Showing the Correlation Relationships between the Attitudes towards Geography and Academic Achievements of Secondary Students in West Bengal

The table 4.4 and figure 4.3 displayed the correlation relationships between attitudes towards geography and academic achievements of secondary students in West Bengal. The table included Pearson correlation coefficients and corresponding significance values (Sig. Value). The Pearson correlation coefficient between attitudes towards geography and academic achievements is 0.738. This indicated a strong positive correlation between these two variables. The highly significant p-value (Sig. Value = .000, $p < 0.001$) suggested that this correlation is unlikely to occur by chance. These findings imply that secondary students in West Bengal who report more positive attitudes towards geography tend to achieve higher academic success in the subject. Conversely, students with less favorable attitudes towards geography may exhibit lower academic achievements. The strong positive correlation underscores the importance of fostering positive attitudes towards geography education to enhance academic outcomes among secondary students in West Bengal. Educators and policymakers may consider implementing interventions and strategies aimed at promoting

interest, engagement, and appreciation for the subject, which in turn can contribute to improved academic performance and overall student success.

H₀₄: There were no significant difference in the educational practices towards geography implemented in secondary schools across different regions of West Bengal.

Implementing educational practices to improve students' attitudes and achievements in secondary schools across different regions of West Bengal requires a multifaceted approach that addresses various factors influencing student engagement and academic success. Here are several strategies that schools and educators considers:

Interactive and Engaging Teaching Methods: Utilize interactive and engaging teaching methods such as project-based learning, experiential learning activities, and educational games to make geography lessons more dynamic and relevant to students' lives. Incorporating real-world examples, case studies, and multimedia resources can enhance students' interest and understanding of geographical concepts.

Culturally Relevant Curriculum: Develop a culturally relevant curriculum that reflects the local context and diversity of West Bengal. Incorporate topics, case studies, and examples that resonate with students' cultural backgrounds and experiences, making geography education more meaningful and relatable.

Inclusive Learning Environment: Foster an inclusive learning environment that values and respects students' diverse perspectives, experiences, and learning styles. Encourage active participation, collaboration, and peer interaction to create a supportive and inclusive classroom culture where all students feel valued and empowered to succeed.

Differentiated Instruction: Implement differentiated instruction techniques to accommodate the diverse needs, interests, and abilities of students. Provide opportunities for student choice and autonomy in learning, allowing them to explore geography topics that align with their interests and learning preferences.

Teacher Professional Development: Provide ongoing professional development opportunities for teachers to enhance their pedagogical skills, content knowledge, and cultural competence. Training sessions, workshops, and collaborative learning communities can equip teachers with effective instructional strategies and resources to support student learning and engagement in geography.

Parent and Community Involvement: Foster partnerships with parents, caregivers, and community members to support students' learning and development. Involve parents in school activities, workshops, and informational sessions to increase their awareness of the importance of geography education and empower them to reinforce learning at home.

Use of Technology: Integrate technology into geography instruction to enhance student engagement and facilitate interactive learning experiences. Utilize online resources, Geographic Information Systems (GIS), virtual field trips, and multimedia presentations to supplement traditional teaching methods and provide students with opportunities to explore geographical concepts in innovative ways.

Formative Assessment and Feedback: Implement formative assessment strategies such as quizzes, surveys, and classroom discussions to regularly monitor student progress and provide timely feedback. Use assessment data to identify areas of strength and areas for improvement, guiding instructional planning and interventions to meet the diverse needs of students.

Promotion of Critical Thinking Skills: Emphasize the development of critical thinking, problem-solving, and analytical skills within geography education. Encourage students to analyze and evaluate geographical information, perspectives, and evidence, fostering a deeper understanding of complex global issues and challenges.

By implementing these educational practices, secondary schools across different regions of West Bengal created a more engaging, inclusive, and effective learning environment that promotes positive attitudes towards geography and enhances students' academic achievements in the subject. These strategies aimed to empower students to become active, informed, and responsible global citizens equipped with the knowledge and skills needed to navigate an increasingly interconnected world.

5. Conclusion

After conducting a comprehensive study on secondary students' attitudes and achievements in geography, several key conclusions have emerged. Firstly, there is a clear correlation between positive attitudes towards geography and higher academic achievements in the subject. Students who expressed a genuine interest in geography tend to exhibit greater engagement, motivation, and perseverance, ultimately leading to improved performance in assessments and examinations. This highlighted the importance of fostering a passion for the subject among students to enhance their learning outcomes. Furthermore, the study revealed that the teaching approach plays a pivotal role in shaping students' attitudes towards geography. Educators who employ innovative and interactive teaching methods, such as experiential learning, field trips, and multimedia resources, are more successful in cultivating students' interest and enthusiasm for the subject. Conversely, traditional, lecture-based instruction often fails to capture students' attention and fails to inspire a deeper appreciation for geography. Moreover, the findings indicated a concerning trend of declining interest and achievement in geography as students' progress through secondary education. This underscored the need for targeted interventions and curriculum revisions to sustain students' interest in the subject and prevent attrition rates. Introducing real-world applications of geography concepts, incorporating current events and issues, and promoting interdisciplinary connections can help reignite students' curiosity and relevance in the subject matter. In conclusion, fostering positive attitudes towards geography among secondary students is crucial for enhancing their academic achievements and cultivating lifelong learners. By adopting innovative teaching strategies, addressing curriculum gaps, and emphasizing the relevance of geography in today's interconnected world, educators can inspire students to become active participants in understanding and shaping the global landscape.

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