

Gender-Based Perception and Appraisal of Geography Education By Students in Malaysian Secondary Schools

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Abstract: *Geography is the core of human civilization. It manifests in cultures, trades, music, traditions, trades science and technology among many other attributes. Geography has played important roles in human endeavour to reach out into the unknown. Therefore, students' perception on Geography Education in Malaysian secondary schools was considered and studied with emphasis on gender-based reactions. The data on the details of Geography curricula for secondary schools in the study areas were obtained from relevant Government agencies while data for students' perception were obtained with the aid of structured questionnaires. Analyses of the data obtained revealed that students generally have interest in Geography in its various forms and their awareness in the prospects in Geography as a profession. However, the policy that positioned Geography to be among the elective subjects, inadequate teaching materials, shortage of quality Geography facilities and activities alongside the scope of various syllabi as well as methods of teaching have translated into constrains, thereby leading to loss of interest in participatory learning of Geography as a subject among students. It was suggested that adequate provision should be made to create awareness for the importance of and for the prospects in Geography. Enhancement of teaching methods and facilities should be primary while material and adequate financial aid should also be provided in all secondary schools. In the conclusions of this study, the need for motivation and enlightenment of students on the relevance of Geography in different career-choices along with its contribution to innovative technology, environmental development and sustainability were cited as matter for concern as a matter of urgent needs.*

Key words: *Appraisal, Career-choice, Civilisation, Existential geography, Gender-based, Geography education*

I. Introduction

Geography, coined from the Greek word γεωγραφία or Geographia, and translated as "Earth Description", is today a Science discipline dedicated to the study of the lands, the features, the inhabitants and the phenomena of the Earth. The word Geography was reported to have been first used by Eratosthenes of Cyrene who lived between 276 and 194 BC and was believed to have started the discipline of Geography with related terms used today^[1]. The Science of Geography notably has two major branches of physical and human Geography. According to McColl^[2], Geography was defined based on William Pattison's "Four Traditions" which were outlined as the Spatial, Area study, Man-Land and Earth Science traditions^[2]. The definitions were brought about by the concept that Geographers study the spatial distribution of things, figure out why they are distributed in such way they are and then use the outcome to proffer solutions cause through such phenomenon.

1.1. Universality of Existential Geography

The diversity of cultures, traditions and the rich values exhibited around the world hinges on the fact that they are geographically human-based and Geography-inclined. Each of human, natural and traditional practices has its strength in it being collectively practiced by people who have tested their will and ability to co-exist and forge a united force based on corporate endorsement of such practice. The eventual and consequent traditions and values differ from people to people and from one Geographical location within or outside the same enclave to the other. Existential Geography has then become the core of every other thing that influences human existence and the sustainability of core values attached to mankind and the natural environment in which they live. The current branches of Geography viz; Physical, Political, Human, Integrated, Regional Geography with Geomatics and other related forms of Geography were indirect products of Existential Geography; otherwise named as the Science of mankind and natural environment. The differentiating appellations of traditions and racio-traditional acronyms are subjective and influenced by corporate culture, practiced along different geographical affiliation. From this point, each geo-cultural enclave has its religion,

traditions, transportation modes, marriage and family methods, foods and lifestyles (including the consequences of habits developed over time through them) and the modern scientific era of space science etc, are products of Geography.

1.2. Geography Discipline in Education Systems

Geography as a subject has a vital role to play in the totality of human civilizations in ages past and present. Human cultures and historical records have been stratified by Geography and its influence has been prominent in the diversity of values and traditions all around the world including the educational systems. Inadequate or lack of basic inculcation of Geography into foundational or basic educational systems and values have in many ways become one key factor responsible for “inter and intra-cultural ignorance” and crisis among people of various ethnic backgrounds and cultures. In view of the complex issues confronting the society in many parts of the world, coupled with resultant social, cultural, economic, political challenges and the race for space technology, Geography and related educational subjects have inevitably become priority tools in reconciliatory and inventive education that give students the skills that are required to understand the environment, its inhabitants and the world in general. The health of the environment and people along with social responsibilities have been reported as issues of geo-cultural and political attributes ^{[3][4][5]}.

Therefore, Geography Education helps youths in the society to gain adequate environmental, social and cultural knowledge of the society in it reference to the world and contribute to the move of sustainable development in order to act responsibly in their domains around the world ^[3]. Apart from Geography, there is hardly any other subject in the field of Social Sciences and Environmental Education that can prepare young people to manage their environment for a sustainable future. We studied the gender-based perception and appraisal of Geography Education by students in Malaysian secondary schools with the objectives of understanding the impact of methods of Geography education, promotion of students’ awareness of Geography and career-choice, description of the state of students’ perceptions of Geography Education, exploration of students attitude towards Geography and reasons behind students choice of Geography as a school subjects in Malaysian secondary schools.

II. Materials and Methods

Studies were conducted in national secondary schools in Hulu Langat District of Selangor State education ministry in Malaysia. The District Educational jurisdiction consisted of forty secondary schools, majority of which were national secondary schools. A total of two hundred students were sampled from selected national secondary schools within the District. The procedures of data collection were complemented with visitation. Collections of data were in two phases. First was familiarisation and introductory talks on the prospects of Geography followed by distribution of questionnaire.

The data collected were revisited to clarify some of the information initially gathered from the schools. The techniques of data collection administered in this study were Direct Observation, Interviews and Questionnaire. These three methods were important and able to provide information on all the research questions and objectives of this study. These questions were in single Likert-type items of four scales in which the respondents were asked to rate from the following: “Strongly Disagreed” to “Strongly Agreed” evaluated in formats, where 4 = Strongly Agreed, 3 = Agreed, 2 = Disagreed, 1 = Strongly Disagreed.

All the information gathered from the fields were arranged while observation data, interviews and questionnaires were validated by two professionals in Geography education, an Inspector of Education and a school’s Head of Subject/Teacher. The collation of results of the findings from all the selected schools was prioritised while the Statistical Package for the Social Sciences, SPSS version 19 software was used to analyse the variables

III. Results and Discussion

In the questionnaire, six items were generated to assess the students’ perception of the study of Geography in secondary school. Their perception towards classroom lessons was negative as students shared the same ideas the teaching method and seek for more interesting ways to offer help to teachers in teaching Geography.

As shown below in Figure 1, 73% female and 27% male in female/male ratio of 62 students Strongly Agreed to not like the methods used in teaching Geography. This represents 31% of overall pool of respondents in the study. Those who Agreed were made up of 70% female respondents and 30% male respondents, resulting in 34.5% of the overall number of respondents. The Disagreed respondents were 42% female and 58% male constituting 22.5% of total respondents while the respondents who Strongly Disagreed were 33% female and 67% male. However, the Strongly Disagreed respondents were 12% of total respondents. In summary, 65.5% of

students did not like methods used while 34.5% of respondents disagreed with the notion that they did not like the teaching method for Geography (Fig. 1).

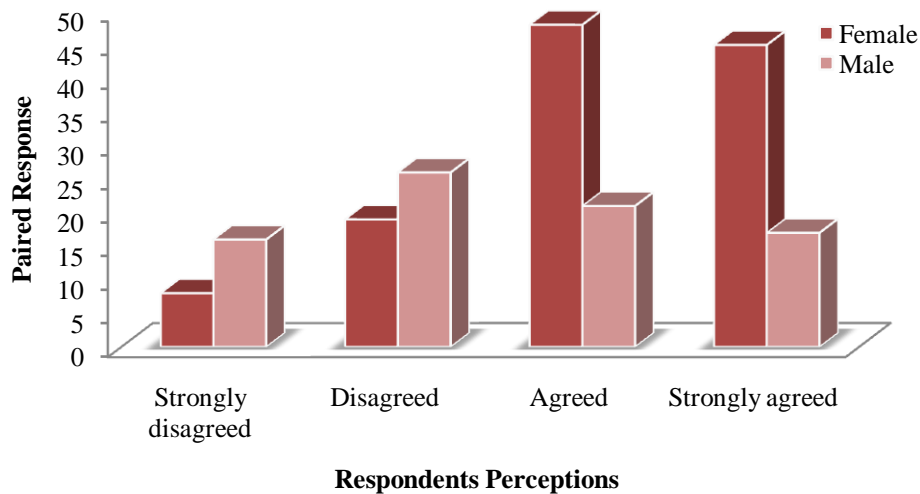


Figure 1: Most students did not like the methods adopted in the teaching of Geography. Those who agreed and strongly agreed were almost side-by-side in number among the female students

As indicated in the descriptive data (Fig. 2) students were asked if they personally like to participate in Geography class tests and examinations. Fifty two percent of female and 48% of male respondents Strongly Agreed while 63% female and 37% male respondents Agreed that they hated Geography class tests and examinations. On the contrary, 33% of female and 67% male respondents Disagreed while 72% female and 28% male respondents Strongly Disagreed. In summary, 74.5% agreed to hating tests and examinations on Geography while 25.5% disagreed (Fig.2).

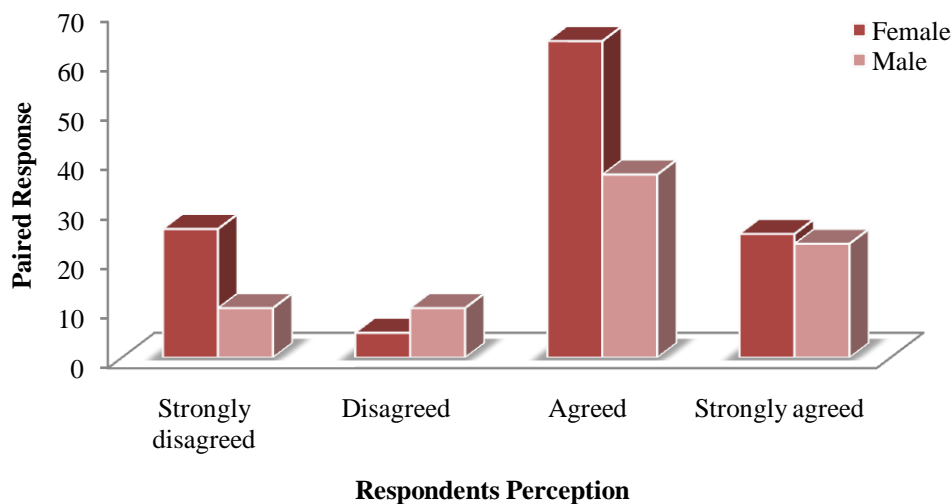


Figure 2: Students perception on their hatred for Geography class tests, assignments and projects

From the results of the evaluation, it was clear that some of the students felt inferior to other students in confidence erosion as Geography students. The inferiority complex was much felt among female studentrespondents than their male counterparts. By comparison, 65% of female and 35% of male respondents Strongly Agreed that they were being looked down upon by students who take other science subjects other than Geography. For those who Agreed, 79% were female and 21% were male respondents. On the contrary, 37.5% female and 62.5% male Disagreed while 23.5% female and 76.5% male Strongly Disagreed. In total, 67% agreed and 33% disagreed (Fig 3).

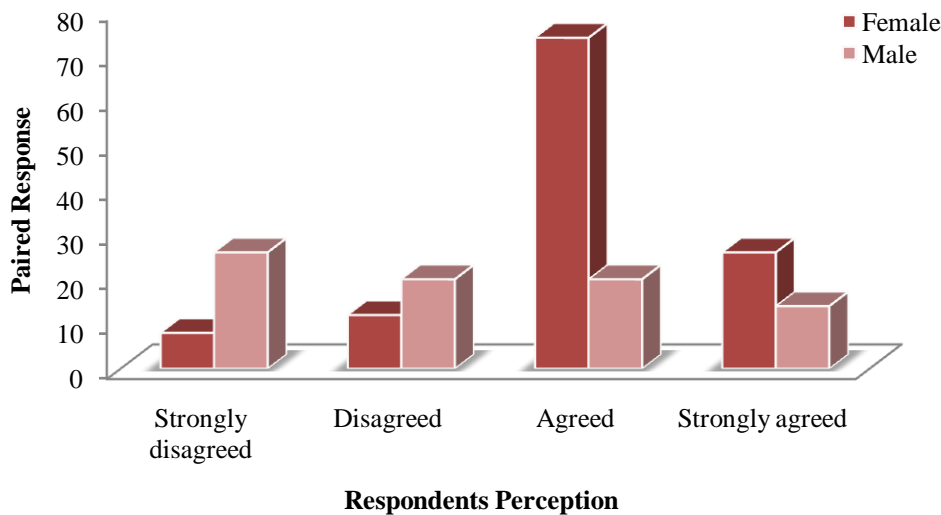


Figure 3: Perception by students who thought they were being looked down upon by fellow students who did not take Geography

When asked about school-organised outdoor and collaborative excursions away from school, 75.5% agreed that there was little or no school-organized outdoor and collaborative activities while 24.5% of respondents thought there were sufficient activities relating to Geography. Out of the numbers, 83% female and 17% male respondents Strongly Agreed while 64% female and 36% male respondents Agreed. On the other hand, 30% female and 70% male Disagreed with 55% female and 45% male who Strongly Disagreed (Fig. 4).

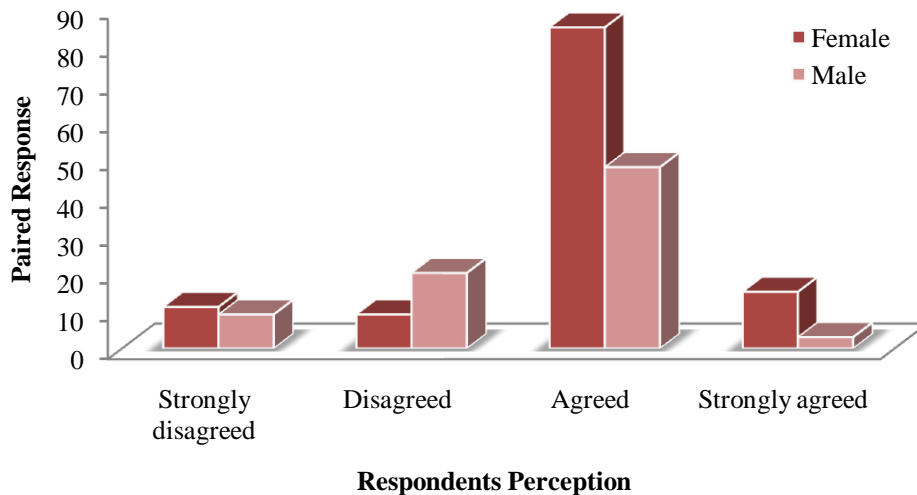


Figure 4: Perception by students that there were little or no school-organised outdoor and collaborative activities on Geography

Results also showed (Fig. 5) that most of the respondents would have preferred to take other subjects of choice in place of Geography. In total 82.5% agreed and 17.5% disagreed. From the summary, 69% of female and 31% of male respondents Strongly Agreed they would have made a different choice in place of Geography. Moreover, 58% female and 42% male respondents Agreed that their choices would have excluded Geography. However, 43% and 57% female and male respectively Disagreed while 57% and 43% female and male respective respondents Strongly Disagreed (Fig. 5).

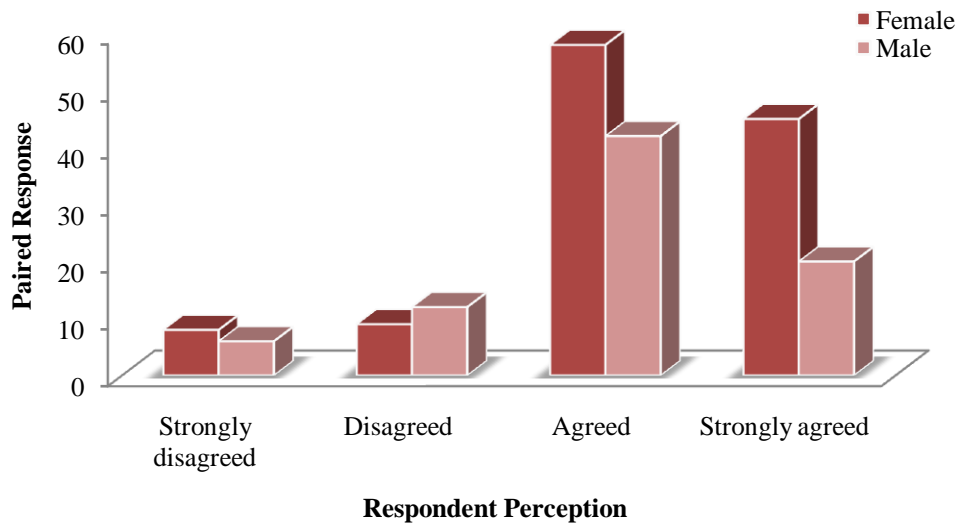


Figure 5: Majority of respondents preferred or would have preferred to take other courses in place of Geography

When asked of the opinion that Geography should be made a compulsory subject in secondary schools, only 17.5% agreed while 82.5% disagreed. Among the Strongly Agreed category, 50% were female and 50% were male respondents while 32% female and 68% male respondents Agreed in contrast to 54% female and 46% male Disagreed but 78% female with 22% male respondents Strongly Disagreed as shown in Fig. 6.

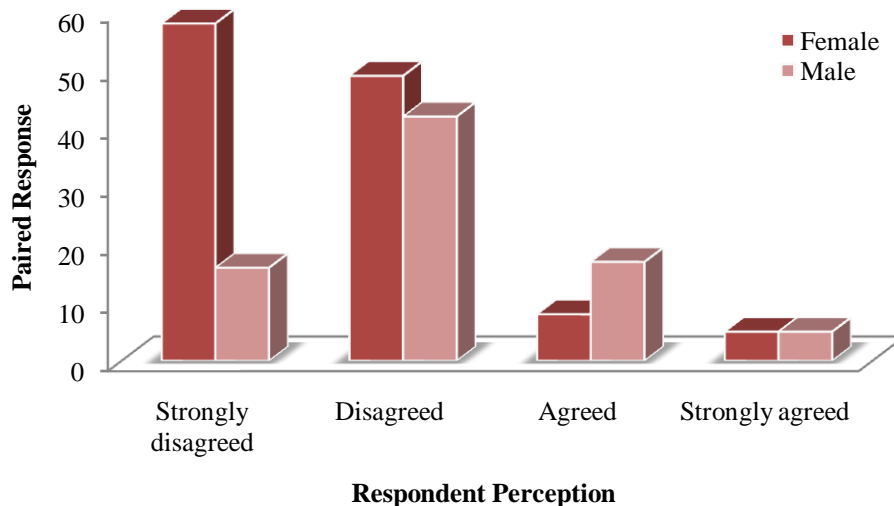


Figure 6: Majority of students disagreed strongly with any suggestion plan to make Geography a compulsory subject in secondary school curriculum

In general most reactions in the study did show more female student respondents taking some stance against activities that tend to jeopardize the importance of Geography and Government efforts in providing quality education. There was a general feeling to have things fixed and a demand for better approach to the teaching and funding of Geography and its place in future careers in related fields among secondary school students.

From the descriptive analysis of students' perception below (Table 1), it was imperative that responses of the students were significant in all the variables irrespective of whether the respondent was a male or female. As such the resultant effect of this in proffering or suggesting necessary actions of improvement cannot be over-emphasized.

Descriptive Statistical analysis of students' perception of learning geography

Variables	Mean	MD	Std. Deviation	Std. Error Mean	Significance difference	t
Did not Like the method used in the teaching of Geography	1.95	1.445	0.864	0.061	0.000	23.665
Hate doing Geography assignments and projects	2.96	2.460	0.756	0.053	0.000	46.029
Others look down on by other students (Confidence erosion)	2.84	2.335	0.778	0.056	0.000	41.908
Little or No sufficient school-organised excursion and collaborative activities	2.80	2.295	0.628	0.044	0.000	51.490
Prefer to do another subject to Geography	2.82	2.330	0.867	0.061	0.000	37.851
Geography be made a compulsory subject in Secondary Schools	2.51	2.005	0.709	0.050	0.000	40.001

An independent sample t-Test (Table 1, Fig. 1), was conducted to know whether the students liked the method the Geography teacher uses in the class lesson. There was a mean difference of 1.45 in the scores for respondents with St. EM = 1.95; SD = 0.86) on condition that $t = 23.66$ and significance at (2-tailed) $p = .000$. These results suggest that the method of teaching Geography play important roles in decision-making process on the individual Geography student and influence on the students' motivation to learn the subject at both secondary and post-secondary levels. Specifically, these results suggest that more teaching aid materials would be needed to increase motivation in learning subjects that are related to Geography and the Environment.

In addition, from Table 1 of the independent sample t-Test to know whether the students attitude to Geography including hatred or cold attitude toward Geography assignments and projects. There was a mean difference of 2.5 in the scores for respondents with $M = 2.96$; $SD = 0.756$ with $t = 46.029$ and significance (2-tailed) $p = .000$. These results revealed that Geography students in secondary schools especially those in upper classes need a lot more motivations that could influence desired interest in participatory class assignments and home work.

Moreover, the results of similar samples t-Test on whether the students confidence erosion and personal negative complexes by students who felt being looked down on by fellow students, did show that there was a mean difference of 2.335 in the scores for respondents St. EM = 2.84; SD = 0.778 the value of $t(119) = 41.91$ with significance (2-tailed) $p = .000$. These results showed the teachers have a lot to contribute in students' performances and students' interest in Geography both in the classroom and in future career choice-making.

Results of the variable that assessed school-organised excursion and collaborative activities revealed a mean difference of 2.295 St. EM = 2.80, SD = 0.628 and $t(119) = 51.49$, with significance at (2-tailed) $p = .000$. These results also revealed the need for regular outdoor activities and Geography-related environmental, social and co-curricular activities. These include excursion-centered assignments, short-notes and tests. Moreover the need for outdoor teachings so that the students could learn the subject with ease was noted. This was because all Geography topics are related to Environmental Education, as such, the need for a lot more of outdoor activities.

On whether the students preferred to do another subject in replacement of Geography as a subject, result from the analysis showed a mean difference of 2.33, St. EM = 2.82, SD = 0.87 with $t(119) = 37.851$ and significance (2-tailed) $p = .000$. There was considerable significance of this in the sense that several other factors including those earlier mentioned determine the future of Geography and related technological essence of this career-subject. This reveals that many more students might have wanted to take up Geography but certain condition attached to their choices either by direct policy by Government and the consequences of such policy^[3] on students might result in difficulty to make right decision in favour of Geography as a subject or in Geography-related careers. For instance in some schools Geography was not part of the electives subjects. The implication among many other side effects was that even if interested students prefer to include Geography in the choice of subjects, it is not available in such schools. Once after the Junior Secondary class 3 examinations in such schools the concerned students cannot study Geography in the upper secondary classes again.

The result on the sixth variable t-Test was about whether Geography should be made a compulsory subject in Malaysian Secondary Schools. There was a mean difference of 2.005 in the scores for respondents where St. EM was 2.51 and SD was 0.71 and $t(119) = 40.00$ and significance (2-tailed) p was .000. In other word, most of the students never wanted Geography to be a compulsory subject in school curriculum.

Generally the results agreed with the statement of Wassmansdorff^[6] that suggested Geography to be the study of the patterns and processes of human and environmental landscapes, between the built and the natural landscapes in which the landscapes comprised real and perceived space; in other word, the objective and the subjective. Moreover Geography was described as both Science and Art^[7].

The approach to the teaching of Geography as a subject in the Asian region varies from country to country. Country-specific syllabi depend much on the traditions indelibly left by the various colonial powers

that ruled the respective countries^{[8][9][10]}. The British influence tends to be dominant in countries like Malaysia, Singapore, Myanmar, and to some extent Brunei while the Dutch tradition is evident in the case of Indonesia and the French in the case of Vietnam, Laos and Kampuche^{[11][12][13]}. According to Van et al^[14], other reasons for these variations depend on significant influences attributed to subjects offered in every school, but in the case of Malaysian Secondary Schools, many issues have put other subjects in favour of the students when making their choices of career^[5] and thereby not able to further their academics in the Geography as a course or career. Geography became a compulsory subject for lower secondary school students in Forms 1 to 3 until formal assessment by Government in the Junior Secondary School examinations at the end of the third year. However, at the Senior Secondary School levels beginning from Forms 4 to 5 Geography becomes an elective subject. As a result, fewer secondary schools in Malaysia offer Geography at this level due to Government educational policies^[3] especially on what subject each school should offer to the students. In other words, not all secondary schools in Malaysia offer Geography as a class subject^[15]. The same situation occurs at the pre-tertiary education level in Form 6. Consequently, students in Senior Secondary School and at pre-tertiary levels have shied away from studying Geography^[16].

According to Mahathir^[17], the Vision 2020 emphasises Malaysia as “a fully developed country, which is developed in every aspect; economically, politically, socially, spiritually, psychologically and culturally”^[18]. The National Philosophy of Education calls for the developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced in a peaceful and harmonious society”^{[19][20]}. This has led to the introduction of religious and moral-based subjects such as Islamic Studies and Moral education into schools and these subjects are compulsory for students. There are plans to increase the intake of science students with the encouragement on the use of computers and multimedia technologies in educational institutions alongside the provision of courses in Information Technology. The challenge of establishing a prosperous society, with an economy that is fully competitive, dynamic, robust and resilient has led to strategies to achieve the “Vision 2020” agenda. However, little or no concession on the importance of Geography in the school curriculum poses further challenge. Geography is one of the ‘dry’ subjects in schools^[21] with less attention paid to it by Government. This thus, has made Geography one least preferred subject among students and teachers in secondary schools in many places including Malaysian schools.

IV. Conclusions

Addressing the educational needs of students, especially their perceptions and ideas of the subjects they are learning in school, is a key to developing appropriate educational strategies and viable frameworks that could help both classroom teachers and teachers-in-training programmes to better prepare them for the Geography lesson and related career-focused subjects in classrooms. To build quality Geography students, teachers require both excellent teacher education and time-to-time academic upgrading in the subject as well as robust professional development including vast and updated knowledge in proactive ways. Both now and in the future, Geography will continue to play the role of an essential school subject to address controversially discussed issues concerning human-environment-society interactions, especially in development and sustainability. Furthermore, Geographical education requires a theory-based development of learning environments that foster deep learning and understanding. Therefore, learning environments should reflect the state of the art research knowledge in psychology, cognitive theory and Environmental Education on how children at various grade levels can acquire process and reason with learning Geography meaningfully. The issue of teachers’ efficacy should be important as teacher education programmes attempt to address the preparation of competent personnel for the teaching of Geography. This is another consideration for further studies.

References

- [1]. Duane W.R. 2010. Eratosthenes’ Geography Fragments collected and translated, with commentary and additional material. Princeton University Press, e-ISBN: 978-1-4008-3221. Pp 320.
- [2]. Mccoll, R.W. 2005. Encyclopedia of World Geography. Facts on File: ISBN: 0816057869. Pp 1216.
- [3]. Akinuoye, M.A. and Abd-Rahim M.N. 2011. Implementation of Environmental Education: A Case Study of Malaysian and Nigerian Secondary Schools. IPCBEE IACSIT International Conference on Biology, Environment and Chemistry. 1: 324-327.
- [4]. Akinuoye, M.A., Jaafar, M. and Kateman B.R. 2014a. Urbanization of rural areas and the risk factors: A case study of five Local Government areas in Oyo State, Nigeria Australian Journal of Basic and Applied Sciences, 8(8): 130-133
- [5]. Akinuoye M.A., Akinuoye, O.F.A. and Jaafar, M. 2014b. Causative factors and problems associated with the use and abuse of Psychoactive Substances among students of secondary schools in Lagelu Local Government of Oyo State, Nigeria. Journal of Research in Humanities and Social Sciences 4 (28): 135-143.
- [6]. Wassmansdorff, G. 1995. Definition of Geography. University of Southern California, Department of Geography. geographyworldonline.com/definition.html. Retrieved 12-2-2015.
- [7]. Perry, J.P. 1969. H.C. Darby and Historical Geography: A survey and review. Geographische Zeitschrift, 57(3): 161-177.
- [8]. United Nations Educational, Scientific and Cultural Organisation (UNESCO) 2008. Geography. Proceedings of the conference for the establishment of the International Union for the Protection of Nature. Paris: <http://www.nie.edu.sg>. Retrieved 12-2-2015.

- [9]. Aziz, A.A. and Maimunah, S. 1999. Impression of a country's system of education and its main feature-Malaysia. In: T.N. Postlethwaite, (Ed.). International encyclopedia of national systems of education. Second edition, Oxford. Elsevier Science. pp. 601-608. Retrieved 6-1-2015.
- [10]. National Institute of Education Singapore 2011. Geography Syllabus in Lower Secondary.SingaporeEducationProgrammes; Ministry of Education. ISBN 981-05-1576-6.
- [11]. Goh, A.T.C., and Wong K.S. 2000. Pile responses caused by tunneling - Discussion. Journal of Geotechnical and Geoenvironmental Engineering 126 (6): 580.
- [12]. National Council for Geographic Education (NCGE) 2011. Position Statements. National Conference on Geographic Education.Retrieved from <http://www.ncge.org>.
- [13]. National Institute of Education Singapore 2006. Geography Syllabus in Lower Secondary.SingaporeEducationProgrammes; Ministry of Education. ISBN 981-05-1576-6.
- [14]. Van der Schee, J., Notté, H. and Zwartjes, L. 2010. Some thoughts about a new international Geography test. International Research in Geographical and Environmental Education 19 (4): 277-282.
- [15]. United Nations Educational, Scientific and Cultural Organisation (UNESCO) 2006. International Symposium on Environment and Teaching Social Sciences in the Framework of General Education. Reference Document, UNESCO-UNEP Intern. Environmental Education Programme. Unesco, Paris. 10: 1007.
- [16]. Singh, S.S.B., Grant K. and Van Bergen, P. 2013.Theoretical framework for assessing the impact of GIS Integrated Teaching on underachieving Malaysian students' motivation to learn Geography. US-China Educational Review 3 (2): 100-107.
- [17]. Mahathir B.M. 2008 The way forward: Vision 2020. www.epu.jpm.m. Pp11-17.
- [18]. Rahimah, H.A. 1998. Educational development and reformation in Malaysia: past, present and future. Journal of Educational Administration, 36 (5), 462-475.
- [19]. Malaysian Ministry of Education (MOE), 2006.National report: Education in Malaysia. Kuala Lumpur: Ministry of Education. <http://www.doe.gov.my//lang=en>,Retrieved3/12/2014.
- [20]. Malaysian Ministry of Education (MOE), 2010.Smart School integrated solution. Kuala Lumpur: Educational Technology Division. <http://www.doe.gov.my//lang=en>,Retrieved 3/12/2014.
- [21]. Association of American Geographers (AAG), 2006. Career Guide Jobs in Geography and related Geographical Sciences. Archived from the original. Retrieved 9-11-2014.