

Manners Among Special Needs Pupils With Hearing Impairment: A Brief Study From The Field

Hifzan Mat Hussin¹

Universiti Malaysia Kelantan

Kamarulzaman Abdul Ghani²

Universiti Malaysia Kelantan

Mohd Norazmi Nordin³

Cluster of Education and Social Sciences, Open
University Malaysia

Nor Fauziyana Mosbiran⁴

Universiti Tun Hussein Onn Malaysia

Mohamad Zaid Musatafa⁵

Universiti Tun Hussein Onn Malaysia

Abstract

Pupils with special needs are reported to have somewhat worrisome disciplinary problems. Even though they are people with disabilities, they still need to be disciplined, especially when they are at school. Their behavior related to their disability cannot be controlled, but some of the behaviors that arise from their delinquency need to be prevented so that it does not become more serious. In this case teachers need to play an important role. If examined, students with hearing problems are among the categories that commit many disciplinary offenses. This qualitative study was conducted to explore the disciplinary problems that are often done by students with hearing problems, while they are more characterized by normal students when compared to students with learning difficulties. Interviews were conducted with 10 special education teachers who teach students with hearing problems in the district of Batu Pahat, Johor, Malaysia. The interviews were conducted online, then recorded, transcribed and thematic analysis was conducted to obtain data. The findings show that, there are five disciplinary problems that are often done by students with hearing problems, namely impolite language, impolite gestures, intercourse between the sexes, associating with teachers and impolite behavior. It is hoped that this brief study can help future researchers to conduct further studies related to this issue.

Keywords

Manners, Special Needs Pupils, Hearing Impairment, Special Education

To cite this article: Hussin, H, M, Abdul Ghani, K, Nordin, M, N, Mosbiran, N, F, and Musatafa. M, Z, (2021) Manners Among Special Needs Pupils With Hearing Impairment: A Brief Study From The Field. *Review of International Geographical Education (RIGEO)*, 11(7), 38-43. doi: 10.48047/rigeo.11.07.06

Submitted: 10-10-2020 • **Revised:** 14-12-2020 • **Accepted:** 18-02-2021

Introduction

Pupils with special needs and disciplinary problems are often the subject of discussion among special education teachers as well as the community. It is quite difficult to differentiate between disciplinary problems and also their natural behavior because students with special needs have various disabilities that can contribute to their behavior (Abdul Jalil et al., 2021; Mohd Noh et al., 2021; Mustafa et al., 2021; Roszi et al., 2021; et al., 2021; Tumisah et al., 2021). However, teachers can know and distinguish between disciplinary problems or natural actions if they have been with the student for a long time. Typically, teachers know their own students better and are able to differentiate their actions (Irma et al., 2021; Suzana et al., 2021; Rohanida et al., 2021; Nazrah et al., 2021;; Shahrulliza et al., 2021;). It is easier if students with special needs are involved, students with hearing problems, because on average students with hearing problems have more normal characteristics than students with learning difficulties (Mohd Arafat et al., 2021; Sumaiyah et al., 2021; Hifzan et al., 2021; Shahrul et al., 2021; Helme et al., 2021). Pupils with hearing problems are usually only hearing impaired and can still learn normally but to some extent (Farah et al., 2021; Syahrul et al., 2021; Quah et al. Al., 2021; Ahmad Syarifuddin et al., 2021 ; Jumiah; et al., 2021). So, it is not surprising that disciplinary reports involving hearing impaired students are still high compared to learning impaired students (Mohd Ali et al., 2021; Parimala et al., 2021; Siti Jamilah et al., 2021; Nor Fauziyana et al., 2021; Nor Fauziyana et al., 2021; Nor Fauziyana et al., 2021; Noel et al., 2021). Based on that ability as well, hearing impaired students still follow the same learning syllabus as normal students and are only differentiated by only a few subjects that have been adapted (Ahmad Shafarin et al., 2021; Junaidah et al., 2021; Farah Adibah et al., 2021 ; Ahmad Shakani et al., 2021; Muhamad Amin et al., 2021). Discipline problems among these hearing-impaired students can become more serious if mild disciplinary problems are not addressed appropriately while they are in school (Santibuana et al., 2021; Nor Diana et al., 2021; Zarina et al., 2021 Khairul et al., 2021; Rohani et al., 2021). As a result of the hearing problems they face, various other misunderstandings may exist that can lead to the occurrence of larger disciplinary problems (Badaruddin et al., 2021; Abdul Rasid et al., 2021). Therefore, this study was conducted to explore the disciplinary problems that are often done by students with hearing problems.

Research Methodology

In order to gather information for this study, a qualitative method was used. Ten special education instructors from the Johor district of Batu Pahat, Malaysia, were interviewed in round-robin fashion. The interviews were semi-structured, with some questions pre-planned and some unexpected. Each interview lasted between 15 and 20 minutes. These meetings are held through the Google Meet platform, which is available online. When the interview was done, recordings were produced and a transcript was made available. To get the data needed, the procedure is completed with a thematic analysis. Open coding, axial coding, and selective coding are all steps in the theme analysis process. The transcripts of the interviews with the participants were used to examine these three stages. The results of this study's selective coding component formed its central topic and conclusions.

Findings

According to the findings of the theme analysis, special needs students with hearing impairment have a certain perception of manners. Rude language, unfriendly gestures, sexual intercourse, mingling with instructors, and impolite conduct are some examples of these statements summarised. It was found that "manners among special needs students with hearing impairment" is the study's primary result after the relevant phrases were coded in the study's axial coding phase. Table 1 summarises the study's results. Table 1: Thematic Process Analysis That Show the Manners among Special Needs Pupils With Hearing Impairment Based on Table 1, all respondents issued statements related to impolite language, nine respondents stated related to impolite gestures and eight respondents issued statements related to intercourse between the sexes. In addition, seven respondents stated related to associating with teachers and impolite behavior. All of these statements form the 'manners among special needs pupils with hearing impairment' theme for selective coding.

Open coding	Axial coding	Selective coding
D1, D2, D3, D4, D5, D6, D7, D8, D9, D10	impolite language	manners among
D1, D2, D4, D5, D6, D7, D8, D9, D10	impolite gestures	special needs pupils
D1, D2, D3, D4, D5, D6, D7, D10	intercourse between the sexes	with hearing impairment
D1, D3, D4, D6, D8, D9, D10	associating with teachers	
D2, D3, D4, D5, D7, D8, D9	impolite behavior	

Discussion

Based on the findings of this study, it can be explained that students with hearing problems often have disciplinary problems. Respondents explained that, this disciplinary problem exists because students with hearing problems have high delinquency, normal growth and lack of understanding related to the consequences and effects of their actions. Teachers in schools play a heavy role in exposing students to hearing problems with the consequences and effects of their disciplinary actions. Some types of disciplinary offenses are committed because students feel that their actions are normal and do not have any offense. Respondents gave examples of disciplinary problems related to mixing of different genders between students with hearing problems. In their observations, hearing-impaired students conversed independently with peers of different genders. When conversing using sign language, they make contact with their friends of the opposite sex. This condition is considered common by students with hearing problems. Therefore, they should be exposed more frequently in relation to the problem. In addition, students with hearing problems also commit many offenses related to politeness and their communication with friends and teachers. With the nature of being too honest in issuing words and gestures, sometimes the words spoken are a bit less polite. The same goes for certain gestures that are also considered impolite. Again it exists because of the student's understanding of the act performed.

Conclusion

In conclusion, students with special needs still have space and opportunity to do disciplinary problems. As a special education teacher, it is very important in exposing students to the effects of committing disciplinary problems on themselves. Pupils with hearing problems are especially likely to commit disciplinary offenses because they do not fully understand something. For example, aspects of communication and association between men and women. They have become accustomed to free association and already consider it not a crime. This problem needs to be addressed immediately by special education teachers so that it does not become a more serious problem in the future.

References

- Abdul Jalil Toha Tohara, Shamila Mohamed Shuhidan, Farrah Diana Saiful Bahry, Mohd Norazmi bin Nordin (2021). Exploring Digital Literacy Strategies for Students with Special Educational Needs in the Digital Age. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.9 (2021), 3345-3358.
- Abdul Rasid Bin Abdul Razzaq, Mohd Norazmi Bin Nordin, Mohamad Zaid Bin Mustafa, Badaruddin Bin Ibrahim (2021). Questionnaire for Special Education Leadership: A Pilot Study. *LINGUISTICA ANTVERPIENSIA*, 2021 Issue-1: 2587-2614
- Ahmad Shafarin Bin Shafie, Siti Nur Kamariah Binti Rubani, Aini Nazura Binti Paimin, Navaratnam Vejaratnam, Mohd Norazmi bin Nordin (2021). Elements of Safety In Job Satisfaction Of Special Education Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5274-5278
- Ahmad Shakani bin Abdullah, Iklima Husna Binti Abdul Rahim, Mohammad Halim bin Jeinie, Muhammad Shakir Bin Zulkafli, Mohd Norazmi bin Nordin (2021). Leadership, Task Load And Job Satisfaction: A Review Of Special Education Teachers Perspective. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5300-5306
- Ahmad Syarifuddin Che Abd Aziz, Tumisah binti Akim, Abdul Halim Bin Ruseh, Sarina Binti Mail, Mohd Norazmi bin Nordin (2021). Elements of Facility In Job Satisfaction Of Special Education Teachers

- In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5239-5243
- Badaruddin Bin Ibrahim, Mohd Norazmi Bin Nordin, Mohamad Zaid Bin Mustafa Abdul Rasid Bin Abdul Razzaq (2021). Special Education Need The True Leadership: The Review. Turkish Journal of Physiotherapy and Rehabilitation; 32(3): 1622-1628.
- Farah Adibah binti Ibrahim, Biamin Ahmad, Rehad binti Ismail, Harlina binti Ismail, Mohd Norazmi bin Nordin (2021). Resource Elements In The Construct Of Special Education Teacher Workload In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5289-5293
- Farah Azaliney Binti Mohd Amin, Noorsuraya Mohd Mokhtar, Farah Adibah binti Ibrahim, Nishaalni, Mohd Norazmi bin Nordin (2021). A Review Of The Job Satisfaction Theory For Special Education Perspective. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5224-5228
- Helme bin Heli, Senin M.S, Yusmi bin Mohd Yunus, Kavita Vellu, Andrew Jason George, Mohd Norazmi bin Nordin (2021). A Review Of The Educational Leaderships Theory For Special Education Perspective. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5217-5223
- Helme Heli, Senin M.S, Ekmil Krisnawati Erlen Joni, Juereanor Binti Mat Jusoh, Mohd Norazmi bin Nordin (2021). Elements Of Experience In The Leadership Construct Of Special Education Head Teachers In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5279-5283
- Hifzan Binti Mat Hussin, Nor Mazlina Binti Mohamad, Syed Nurulakla Syed Abdullah, Ida Rahayu Mahat, Mohd Norazmi bin Nordin (2021). Why Special Education Is Always In Our Hearts? Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5202-5210
- Irma Shayana Bte Samaden, Firkhan Ali Bin Hamid Ali, Nor Shadira Jamaluddin, Mazidah binti Ali, Mohd Norazmi bin Nordin (2021). Elements of Attitude In The Leadership Construct Of Special Education Head Teachers In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5151-5156
- Irma Shayana Bte Samaden, Irfah Najihah, Shaliza Alwi, Rabiatul Munirah, Mohd Adli bin Mohd Yusof, Mohd Norazmi bin Nordin (2021). Time Element In The Construct Of Special Education Teacher Workload In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5141-5145
- Irma Shayana Bte Samaden, Senin M.S, Noor Lina binti Mohd Yusuf, Biamin Ahmad, Mohd Norazmi bin Nordin (2021). A Pilot Study on The Influence Of Headmasters Leadership On Workload And Job Satisfaction Of Special Education Teachers In Johor, Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5157-5171
- Jumiah binti Mustapa, Sarina Binti Mohd Yassin, Fauziah binti Ani, Parimala A/P Palanisamy, Mohd Norazmi bin Nordin (2021). Physiological Elements In Job Satisfaction Of Special Education Teachers In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5244-5248
- Junaidah Yusof, Farah Adibah binti Ibrahim, Senin M.S, Hilmiah Binti Haji Hassan, Mohd Norazmi bin Nordin (2021). Elements of Work Environment In The Construct Of Special Education Teacher Workload In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5284-5288
- Khairul Hanim Pazim, Roslinah Mahmud, Noor Fzlinda Fabeil, Juliana Langgat, Mohd Norazmi bin Nordin (2021). Special Education Teachers Job Satisfaction In Malaysia: A Review. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5329-5332
- Mohd Ali Masyhum bin Mohd Nor, Ahmad Faqih Ibrahim, Syahrul Anuar Ali, Mohd Fairuz Affendy bin Md Nordin, Mohd Norazmi bin Nordin (2021). Elements of Leadership Style In The Leadership Construct Of Special Education Headmasters In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5249-5253
- Mohd Ali Masyhum, Ophelia, Masliah Musa, Daraini Oyot, Mohd Norazmi bin Nordin (2021). Headmasters Leadership On Task Load And Job Satisfaction Of Special Education Teachers In Malaysia. Turkish Journal of Computer and Mathematics Education Vol.12 No.11 (2021), 5294-5299
- Mohd Arafat Bin Jaafar, Muhammad Talhah Ajmain@Jima'ain, Mazita binti Ahmad Subaker, Kavita Doraisamy, Mohd Norazmi bin Nordin (2021). Special Education Teachers Task Load In Malaysia:

- A Review. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5333-5337
- Mohd Arafat Bin Jaafar, Noor Azlin Binti Abdullah, Mohd Sabri Bin Jamaludin, Muhamad Amin bin Haji Ab Ghani, Mohd Norazmi bin Nordin (2021). Unique Attitude? The Concept Of Special Education Leadership. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5192-5196
- Mohd Noh, A. N., Razzaq, A. R. A., Mustafa, M. Z., **Nordin, M. N.**, Ibrahim, B. (2021). Sustainable Community Based Ecotourism Development. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(9), 5049-5061.
- Mohd Noh, A. N., Razzaq, A. R. A., Mustafa, M. Z., **Nordin, M. N.**, Ibrahim, B. (2021). Elements of Community Capacity Building (CCB) For Cbet Development. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(9), 4970-4981.
- Mohd Noh, A. N., Razzaq, A. R. A., Mustafa, M. Z., **Nordin, M. N.**, Ibrahim, B. (2021). Future Community-Based Ecotourism (CBET) Development. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(9), 4991-5005.
- Mohd Norazmi Bin Nordin, Mohamad Zaid Bin Mustafa, Badaruddin Bin Ibrahim, Abdul Rasid Bin Abdul Razzaq, Nor Fauziyana Binti Mosbiran (2021). Special Education Unique Leadership Style: The Concept. *LINGUISTICA ANTVERPIENSIA*, 2021 Issue-1: 2244-2261
- Muhamad Amin bin Haji Ab Ghani, Abidah Aqilah Binti Mohd Noor, Zulfadli Bin Mohd Saad, Mohd Mazhan Tamyis, Mohd Norazmi bin Nordin (2021). Improving The Writing Skills Of Jawi Connection Letters Of Students With Learning Disabilities Using The Finger Step. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5307-5312
- Mustafa Kamal Amat Misra, Nurhanisah Senin, Abdull Rahman Mahmood, Jaffary Awang, Mohd Norazmi bin Nordin (2021). Analysis On Ashācirah And Ibādhiyah On The Attributes Of God. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.10 (2021), 7661-7673
- Nazrah Binti Jamaludin, Kway Eng Hock, Elia Binti Md Zain, Norkhafizah binti Yussuf, Mohd Norazmi bin Nordin (2021). This Special Education Is Unique For Teachers, Students, Parents, Leaders And Organizations. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5179-5183
- Noel Jimbai Balang, Bong Lie Chien, Mimilia Binti Gabriel, NorHamidah Binti Ibrahim, Mohd Norazmi bin Nordin (2021). Elements of Teacher Readiness In The Construct Of Special Education Teacher Workload In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5269-5273
- Nor Diana Mohd Idris, Junaidah Yusof, Fazli Abdul-Hamid, Muhamad Helmy Sabtu, Mohd Norazmi bin Nordin (2021). Formation of Special Education Leadership Study Questionnaire Set That Influences The Task Load And Job Satisfaction Of Special Education Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5319-5323
- Nor Fauziyana binti Mosbiran, Ahmad Faqih Ibrahim, Muhammad Yasin Omar Mokhtar, Muhamad Amin bin Haji Ab Ghani, Mohd Norazmi bin Nordin (2021). Elements Of Welfare In Job Satisfaction Of Special Education Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5264-5268
- Nor Fauziyana Binti Mosbiran, Mohamad Zaid Bin Mustafa, Badaruddin Bin Ibrahim, Abdul Rasid Bin Abdul Razzaq, Mohd Norazmi Bin Nordin (2021). Teacher Competencies To Provide Effective Individual Education Plan For Students With Special Needs Hearing Problems: An Early Review. *Turkish Journal of Physiotherapy and Rehabilitation*; 32(3): 1617-1621.
- Parimala A/P Palanisamy, Santibuana Binti Abd Rahman, Siti Azura Binti Bahadin, Helvinder Kaur a/p Balbir Singh, Mohd Norazmi bin Nordin (2021). Relationship Elements In Job Satisfaction Of Special Education Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5254-5258
- Quah Wei Boon, Mohd Fairuz Bin Mat Yusoff, Nurhanisah Binti Hadigunawan, Fatin Nabilah Wahid, Mohd Norazmi bin Nordin (2021). A Review Of The Management Theory For Special Education Task Load Perspective. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5234-5238
- Rohani Binti Marasan, Andrew Lim Ming Yew, Dg. Norizah Ag. Kiflee @ Dzul kifli, Colonius Atang, Mohd Norazmi bin Nordin (2021). A Principal's Leadership Excellence Though Disposition of Attributes. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5360-5371

- Rohanida binti Daud, Shazali Johari, Fazli Abdul-Hamid, Syahrul N. Junaini, Mohd Norazmi bin Nordin (2021). Face and Content Validity For The Special Education Leadership (Integration) Questionnaire In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5172-5178
- Roszi Naszariah Nasni Naseri, Maryam Mohd Esa, Norlela Abas, Nurul Zamratul Asyikin Ahmad, Rafidah Abd Azis, Mohd Norazmi bin Nordin (2021). An Overview Of Online Purchase Intention Of Halal Cosmetic Product: A Perspective From Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.10 (2021), 7674-7681
- Roszi Naszariah Nasni Naseri, Nurul Zamratul Asyikin Ahmad, Sharina Shariff, Harniyati Hussin, Mohd Norazmi bin Nordin (2021). Issues And Challenges Of Online Shoppingactivities On The Impact Of Corona Pandemic :A Study On Malaysia Retail Industry. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.10 (2021), 7682-7686
- Santibuana Binti Abd Rahman, Helvinder Kaur a/p Balbir Singh, Albert Feisal@Muhd Feisal bin Ismail, Salsuhaida binti Sulaiman, Mohd Norazmi bin Nordin (2021). Formation Of Special Education Leadership Study Interview Protocol That Affects The Task Load And Job Satisfaction Of Special Education Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5313-5318
- Shahrul Hapizah Musa, Elia Binti Md Zain, Muhd Zulkifli Ismail, Hifzan Binti Mat Hussin, Mohd Norazmi bin Nordin (2021). Something Important For Special Education In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5211-5216
- Shahrulliza binti Saharudin, Siti Azura Binti Bahadin, Helvinder Kaur a/p Balbir Singh, Shazali Johari, Mohd Norazmi bin Nordin (2021). The Single Predictor Of The Influence Of Headmasters Leadership On Special Education Teachers Job Satisfaction In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5184-5191
- Siti Jamilah Samsuddin, Mazidah binti Ali, Ashari Ismail, Mohd Saifulkhair Omar, Mohd Norazmi bin Nordin (2021). Elements Of Work Type In The Construct Of Special Education Teacher Workload In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5259-5263
- Sumaiyah Mohd Zaid, Nurhanani Che Rameli, Aidah Alias, Mohammad Fahmi Abdul Hamid, Mohd Norazmi bin Nordin (2021). Virtual Learning Of Deaf Students: We Miss Pupils, We Hate Covid19. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5197-5201
- Suzana Basaruddin, Muhamad Helmy Sabtu, Azizan Arshad, Irma Shayana Bte Samaden, Mohd Norazmi bin Nordin (2021). Elements Of Knowledge In The Leadership Construct Of Special Education Head Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5146-5150
- Syahrul Anuar Ali, Khadijah binti Mustapha, Jalila J., Sofia Binti Elias, Mohd Norazmi bin Nordin (2021). Financial Elements In Job Satisfaction Of Special Education Teachers In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5229-5233
- Tumisah binti Akim, Siti Azura Binti Bahadin, Helvinder Kaur a/p Balbir Singh, Irma Shayana Bte Samaden, Mohd Norazmi bin Nordin (2021). Elements Of Qualification In The Leadership Construct Of Special Education Headmasters In Malaysia. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5135-5140
- Zarina Osman, Syahrul Anuar Ali, Salwati binti Su@Hassan, Kothai malar Nadaraja, Mohd Norazmi bin Nordin (2021). Special Education Leadership In Malaysia: A Review. *Turkish Journal of Computer and Mathematics Education* Vol.12 No.11 (2021), 5324-5328