

GLOBAL JOURNAL OF ADVANCED ENGINEERING TECHNOLOGIES AND SCIENCES**MAKING SHORT VIDEO AND MULTI-SENSORY INSTRUCTIONAL PACKAGES FOR MORAL EDUCATION COURSES IN TEACHER EDUCATION INSTITUTES****Mohd Razimi Bin Husin*, Hishamuddin Bin Ahmad, Mahizer Bin Hamzah**

* Faculty of Human Development, Universiti Pendidikan Sultan Idris, Malaysia

DOI: 10.5281/zenodo.2222398**ABSTRACT**

The purpose of this study is to explore the specific trends and situations in short video use and Multi-sensory Instructional Packages (MIPs) to accommodate the learning styles of moral education students in Teacher Education Institutes. Thus, this study was focus on the perceptual strengths that was students preference to learn via videos, and how the video could help students in acceptance information and skills in learning Moral Education. This is a case study in where data were collected through inter-views. This study was conducted on six students. Semester four students were chosen through purpos-ive sampling from two Teacher Education Institutes in Malaysia. The construct and internal validity were verified by experts while the external validity verification was supported by the findings from other studies with existing theories. Data of the study were analyzed by applying constant comparison techniques of the use of video using the Nvivo software. This comparison is to identify the themes of the use of video, and its characteristics, and needs of students. Therefore, Dunn and Dunn's Multi-sensory Instructional Packages (MIPs) were used as a guide in the interviews to obtain data on the study of information acceptance in the learning of Moral Education. The results of the analysis showed that the use of videos need to address three aspects which include the Multi-sensory Instruc-tional Packages activities, elements of moral and emotions in humans that enabled students to memo-rize the content knowledge and participate in the discussions of the topic taught. The research had produced the learning guidelines on the choose or make of videos, and a model on learning with short video to accommodate the learning styles of moral education students in Teacher Education Institutes which could be used by instructors in their professional practice in the lecture room.

KEYWORDS: Video, Learning Styles, Moral Education, Multi-sensory Instructioanal Packages, Dunn and Dunn Learning Styles Model.

INTRODUCTION

According to Ramlah Jantan and Mahani Razali (2002), as reported by cognitive psychologists, learning is an active mental process for learning, storing, remembering and using information. However, instructors should not force students to learn quickly (Suppiah Nachiappan et al., 2012). Another view of the cognitive psychologists is that the knowledge gained is the result of learning and it involves the motivation of a person to learn (Woolfolk, 1998). The Learning Styles Model is based on the Information Processing Model. Processing information means humans' mental activities related to receiving, saving and reproducing information for use (Woolfolk, 1998). Dunn and Dunn (1978) defined the learning styles as the way people or individuals concentrate on understanding and remembering new information or skills.

According to Dunn and Dunn (1992), multi-sensory Instructional Packages (MIPs) are especially appealing to students who find it difficult to sit quietly for long periods of time or who cannot listen to a instructor without frequently interrupting or losing attention. All perceptual strengths are appealed to instructional packages include visual, auditory, tactual, and kinesthetic activities. As an example what is possible in a short film, one student might be concentrating with a Multi-sensory Instructional Package (MIP) on the immoral behaviour from the video while another, in a different section of the room, could be mastering the concept of justice.

According to Dunn and Dunn (1992), even when a student has only a single perceptual strength, he or she is likely to learn and to complete objectives because everything that is taught is introduced and reinforced through the four major learning senses that is visual, auditory, tactual, and kinesthetic. A single perceptual strength such as visual is a part in the perceptual preference in the Dunn and Dunn's Learning Style Physiology Stimulus.

The most appropriate methods and techniques are executed to meet students needs. One of the method of visual perceptual preference is learning via a short film, or another term is short video. The short video is any motion picture not long enough to be considered a feature video. The Academy of Motion Picture Arts and

Sciences defines a short video as an original motion picture that has a running time of 40 minutes or less, including all credits.

PROBLEM STATEMENT

Lecturers play an important role in delivering information and skills to trainee teachers. Lecturers need approaches and presentation methods that are easily understood and remembered by students in delivering information and skills in various aspects (KPM, 2005a, 2005b). MIPs appeal to all perceptual strengths. They include visual, and auditory activities. These elements such as preference to learn with MIPs, or enjoy the lesson with any kind of visual activity during study. The extent to which lecturers practice and emphasize learning and teaching based on MIPs to respond to individual learning styles in courses instructed which cannot be empirically proven. Therefore, the study on the practice in adapting to the students' learning styles through a MIP during the teaching and learning process was carried out in this research to answer the questions.

Previous studies have shown that there is a link between the learning styles and the use of the latest technology. A study revealed students learned better when receiving instruction via visual and spoken tools (Fish, Mun & A'Jontue, 2016). According to Dunn and Griggs (1995), the use of technology is an element in physiological stimuli. Similarly, the selection of approaches and methods of delivery to students should be in accordance with the learning styles as the findings have shown students respond positively, receive information easily and get better performance especially when adapted to the latest technology (Hwang, Sung, Hung & Huang, 2013).

Therefore, this study examined the inclination of the participants towards short video features, as well as personal feature sets in exploring the elements of short video that conform to a MIP.

Research Objectives

The study was conducted to:

- i) Evaluate the features of effective short video in learning Moral Education.
- ii) Explore short video usage techniques that enhance the quality of teaching and learning of Moral Education to students.
- iii) Develop a model of short video for core and elective courses of Moral Education.

Importance of the study

The main purpose of this study is to contribute significantly to Moral Education, especially through learning practices based on the MIPs and physiological elements of learning styles. When learning practices are based on students' learning styles, information and skills can be delivered easily and perfectly. Higher education students will benefit from this study when lecturers have the knowledge of this technique and implement the learning using short video to gauge students' interest.

In addition, this study also benefits teachers when the learning practices are based on appropriate physiological stimulus that refers to the model through empirical studies which are proven to be effective. Finally, this study will also be used as a source of reference by the Ministry of Education as well as students and lecturers at Higher Education Institutions in an effort to produce effective teaching and learning strategies. Furthermore, this study provides favorable circumstances for future researchers to conduct further research to generalize to all the Higher Education Institutions in all fields of study.

Research background

Students' behavior also improved through the teaching using the learning style which is preferred by the students. Studies that see how different students learn how to teach is very meaningful to the national education. Efforts should be made to encourage students to take advantage of their strengths to be more competitive and can contribute to others according to their best ability (Ranti Novianti, 2014). The traditional education system that is lecturer-centered is no longer relevant to the students. The approach that meets their needs will stimulate the learning process. Therefore, various strategies are used to meet the needs of students such as self-regulated learning that stimulates students with self-learning and prevents students from receiving only information from their lecturers (Krvacic & Albert, 2012).

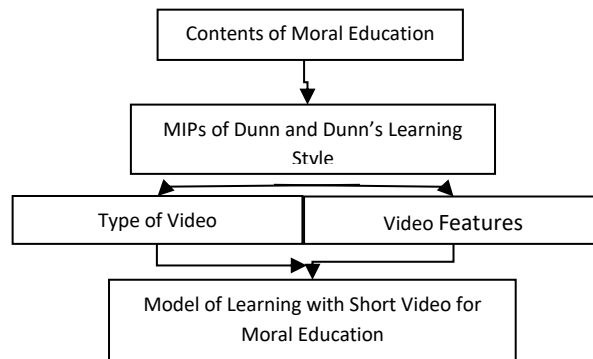


Fig. 1: Qualitative Case Study on Moral Education MIPs to Respond to Individual Learning Style at the Teacher Education Institutes of Malaysia.

LITERATURE REVIEW

A study compared student experiences after viewing slides and images in the video during lectures indicated that students' ratings of those who viewed videos with fewer visuals rated their experiences higher as compared to students who viewed more visuals (Fish, Mun & A'Jontue, 2016).

Everyone has his or her own learning styles and this reflects each individual's strength. As each individual has a distinctive learning style, every student should know their own learning styles and the lecturers should know their students' learning styles to apply the lessons that are appropriate to the learning styles. Fine (2003) examined the learning styles approach, and found that students were learning better, could retain their memory better and had more fun when learning based on their own learning materials. According to cognitive psychologists, learning styles are ways individuals make perceptions and process information to form concepts and principles (Baharom Mohamad and Iliyas Hasyim, 2010). One's learning style develops through the feelings of someone who feels the best way for them to learn. This is the influence of the various shades of learning which include environment, perception, intellect and individual personality (Sze, 2009). Other studies found that auditory-style students showed, they were interested in visual tools such as video (Rogowsky, Calhoun & Tallal, 2014).

METHODOLOGY

This study used a qualitative approach of case studies that involved interviews whereby data were collected using interview protocols, and video recorders. The students' learning analysis was carried out using Nvivo software that determined the findings of this study. Case studies require detailed investigations into individual or group practices, cultures or behaviors (Meriam, 1988). Case studies are compatible with the intentions and goals of the study, namely to understand and explore the situation and the practice of a person in the context of real life. Case study on these students will show their real needs and lecturers can plan to meet those needs (British Ministry of Education, 2000).

Sampling of the study

The selection of the research participants was based on purposive sampling that met the specific criteria specified. The specific criteria were based on research issues to be studied in depth to ensure the right choice of participants (Yin; 2003a, Burns; 2000 & Meriam; 1998).

The participants of this study had the same characteristics. They were six students from two selected Campuses of Teacher Education Institute. The six students were in Semester 4 and were about 22 years old. They have successfully get A in all Moral Education courses for the previous semesters.

Research procedure

In short, the methodology suitable for this study was the qualitative approach of case studies. In the early stage of this study, the participants of the study were chosen based on the criteria determined. At the same time, the interview protocols were prepared as well as video recorders before the researchers were ready to conduct the fieldwork. The interview protocols were validated first by experts.



The data were analyzed after each fieldwork. The process was continuous until the data were saturated. At the end, the researchers made the conclusion to all data collected based on saturated themes. All those data were analysed using Nvivo software that determined the findings of this study.

The models used were usually evaluated through empirical methods. However, this study explored a qualitative set of personal features in receiving, collecting and processing information and usage concepts, materials that were important and appropriate in learning through video applications. Therefore, a model was developed based on the data of a set of personal characteristics and the suitability of material based on the students' learning styles. Assessment of the model will be carried out in the next study for the purpose of general generalization of this finding.

Data collection tools

The main method in this study was interview. The interviews were analyzed qualitatively using Nvivo software to obtain the theme to answer the research questions. The interviews conducted on participants for this study required an appropriate protocol. The protocol of this study contained the components proposed by Othman Lebar (2009). The researchers used semi-structural interview methods in the data collection. The questions were based on Dunn and Dunn's MIPs of learning styles. Interview data were transcribed to obtain the theme of the study based on the participants' tendency towards short film features, usage techniques, material appropriateness and personal feature set in exploring the elements of short film. The theme was modeled as a guide and general reference.

Validity of the study

For the purpose of fulfilling the validity of constructs, evidences were obtained from various sources of interviews and video recordings. All the data collection methods were analyzed to ensure that there was a string of strong evidences. In order to obtain the internal validity of this research, the findings were verified by field experts which included ICT and psychology. Meanwhile for the external validity, the researchers had to compare the findings with the existing theories, making the analysis of the similarities and the differences between the findings of this study and the second party to enable the study findings to be assessed to what extent it can work and function in a second-party situation (Yin, 1998).

RESULT AND DISCUSSION

The findings of this study focused on the aspects of learning styles in the use of video among students at the Teacher Education Institutes of Malaysia (ITEs). Some of the key points that were found in the study involving students who favored video applications in learning such as the type of video that could stimulate learning, and the video's effect that made the students interested in the video displayed.

Sometimes students had difficulty to maintain concentration during lectures. They found it difficult to receive information through reading only. Through the perceptions element in this study, videos shown using LCD screen could prevent them from becoming sleepy. The attractive video led them to enjoy the lessons taught. Otherwise, the topics taught which used the explanation teaching method would be boring. The story was easily understood through the video shown as they were able to relate what they watched in the following transcript;

(MS: F / Enjoyment): *"I feel very happy and learning is more fun on that day.. if not a bit boring because there is no attraction of a great pleasure to learn."*

Type of video (ToV) required by students

Students who have a Video Application Physiology learning styles tend to have preference towards some types of video which were presented to them. These types of videos are short film, ads, powtoon, and animation. Short films are among the most popular video types that are favored and able to sustain greater concentration among students.

Table 1: Type of video (ToV)

ToV	S1	S2	S3	S4	S5	S6
Short video	/	/	/	/	/	/
Powtoon	X	/	X	X	/	X
Ads	/	/	/	X	/	X

Students were fonder of watching movies that were dense with moral values. The story should be complete and interesting. When Zira was asked about what she needed, she replied;

(MS: F / Video movie): *"Interestingly, you watch at the story. Watch one of these movies for about 20 minutes, a short story. That's interesting if we do not see that before and we do not know what's going to happen after that. We have to look at it from the beginning till the end. We just know what's going to happen."*

They were given an example of the short film such as Thailand short film and Thailand ads. But they were related the short film to advertisement or ads because most of short film in Thailand are the same idea of the way of making. Sometimes they could not differentiate between the short film with the ads until they finish watching. The difference is the ads will come out with the promoting or selling a product, service or idea.

The such video ads are among the most popular video types that are favored and able to sustain greater concentration among students. Based on the interviews, students preferred videos which could bring about better focus as reported below;

(MS: F / Video ads): *"The videos I mean are ads video. Contain pure value. There are ads, the advertisements are very nice from people of Thailand."*

However, video ads are slightly different to short video in term of its functions. Video ads is communicated through [media](#) such as [television](#) or [new media](#) such as social media. The actual presentation of the message in a medium is referred to as an advertisement, or "ad" or advert for short. Advertising is a message to promote or sell a product, service or idea.

Instructional packages are a boon to lecturer who want to individualize instruction through direct appeal to personal learning styles but who cannot stretch themselves thin enough for a class full of students with a variety of needs and problems. Participants of this study give variety of activities to meet their needs. Based on the interviews, students preferred an another attractive instructional activities to be done before or after short video show which could bring about better focus as reported (Table 2) below.

Table 2: Preferred activities to be done before or after short video show

1. Simulation
2. action and re-action
3. Singing
4. Appropriate discussions
5. Writing script for following chapter
6. Listen to my opinion
7. Conclude the idea

These attractive activities should relate to the short film shown to students.

Elements of moral

Besides that the short video should full with the elements of Moral value to appreciated by viewers especially moral education students. The elements are included in the syllabus of Moral Education courses that involves moral issues and the challenges of appreciating pure values. Among the important topics of the elements are Bullying, Vandalism, Hang Out, Sexual Harassment, Brush, Domestic violence, Snatch, Child abuse, Illegal racing, Road Crime, Elderly Neglect, Environmental pollution, Women's rights, and Rights of the Child

Emotions in humans

Look at emotional aspect, Thailand short video will give a very meaningful, touching and a profound effect included sad. According to Crain (1996), there are six categories of emotions in humans that are happy, fearful, surprised, angry, hateful and sad. Another aspects the video were given an inspiration about something, successful in managing to highlight something objectively.

An example of the short video as stated by the participants was the video with title "Don't Judge Anyone From One Side Stories" that could retrieve through <https://www.youtube.com/watch?v=BjCGINUAFYQ>. People always think bad side of other people although the other people were actual do the good deeds to help others. This short video revealed to viewers that the viral of the fierce and the unsympathetic woman that collected the dept from the seller of stall with an extreme action like throwing seller scales, and other items. In contrast, the woman was in her way to abolish fraud of the seller such as modified the scales in order to get more profit from their business.

Another specified video stated by the participants was video navigated through <https://www.youtube.com/watch?v=1YUZkiQAVhA>. The video shown about sacrifice of mother that willing to take heavy burden in managing her body weight even though she was an old and weak woman to allow her to donate her kidney to her only son. The story was very interesting when its storyline is great, attractive, and the plot is not flat. The plot begin with the effort of the mother to gain loss weight with various assumptions from the community. According to participants, the plot should move upward before the climax as in the following transcript;

(VE: P / Interesting storyline): *"If you take a video of that long. For example, though the video is like 20 minutes but it has a string, as it has an interesting plot like start up, conflict. If it pulls me off, my focus will end. When I'm in the middle of it, I'm not surprised to tell you my story, it's hard to pay attention."*

The last short story was about the relationship between two siblings that could retrieve from https://www.youtube.com/watch?v=DJnWmDHnw_g. The video want to convey the message about sibling relationship is unbreakable. Where the worst of them, but will not break the brotherhood. They are all meaningful to us. So, love our siblings.

Short Video Effects Required by students

Students were also fonder of watching movies that were dense with moral values. The story should be complete and interesting. Besides the mentioned consequences of the videos, the other effects of video shown that the act was very extremely intense, acting diligently and effective.

All the thailand short video is about 5 minutes duration. Not too long and not too short. When Zira was asked about what she needed and the duration of video, she replied;

(ToV: P / Video movie): *"Interestingly, you watch at the story. Watch one of these movies for about 20 minutes, a short story. That's interesting if we do not see that before and we do not know what's going to happen after that. We have to look at it from the beginning till the end. We just know what's going to happen."*

The processing of information by students was more effective as they could imitate what they watched. The ideal way to keep them focused was to display attractive videos with suitable music. A point of view about the appropriateness of music was the statement made by Zira;

(VE: P / Music appropriate to situation): *"In my opinion, the music is very important to attract someone's mood for example in a sad ad we need to advertise for a happy happy song. It means to pull the mood of the follower is*

to put a sad song. It means that the student will be impressed by the song because most of our students love listening to music, love to watch videos."

The story was very interesting when its storyline is great, attractive and of a non-flat plot. According to participants, the plot should move upward before the climax as in the following transcript;

(VE: P / Interesting storyline): *"If you take a video of that long. For example, though the video is like 20 minutes but it has a string, as it has an interesting plot like startup, conflict. If it pulls me off, my focus will end. When I'm in the middle of it, I'm not surprised to tell you my story, it's hard to pay attention."*

The story is real because the character lives. The good character is an ideal way to keep them focused, otherwise they would be as Priyanka stated;

(MS: E / The character lives): *"...face expression and body language also make the story fun to watch."*

RESEARCH DISCUSSION

Individuals with visual perceptions are more likely to respond and understand information and skills with learning aid materials such as videos, slides, charts, televisions, graphs, diagrams and illustrations. Dunn and Dunn (1992) explain visual perceptions involving focus on paragraph reading and page readings. According to La Lopa (2013), in explaining the learning style theory, instructors must know that students learn in a unique way, usually in auditory, visual, and kinesthetic modes. To improve students' performance, firstly all educators need to identify the students' learning styles and then match the way they teach for each style. Therefore, this study has found that the acceptance of students will be more robust and effective through a combination of audio and visual perceptions. In addition to the elements mentioned previously, there are also students who like to learn by listening to songs through videos shown. This involves auditory perception as individuals with high auditory perceptions can learn effectively if exposed to specialized audio devices such as radio, cassette and video. These students will remember the information being heard, able to give pay attention and can describe the sounds heard (Dunn & Dunn, 1992).

In the early stages, the researchers compared Dunn and Dunn Models with the research findings. For that, it was suggested that the construction of a model in another form as this model not only contained stimulus as in Dunn and Dunn Model, but it involved three different elements of short video which were MIPs activities, elements of moral, and emotions in humans as illustrated below.

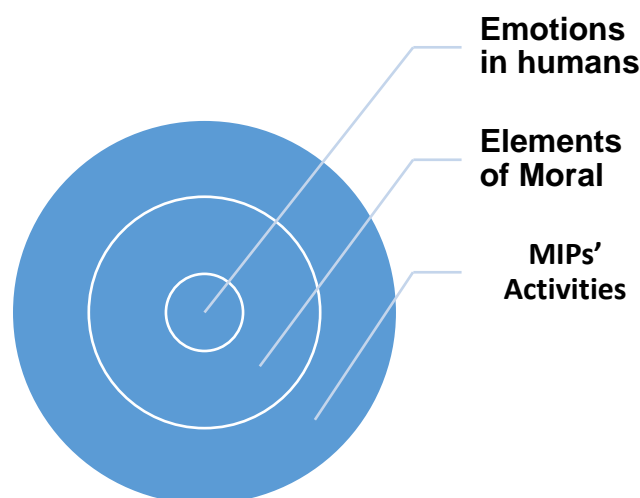


Fig. 2: Model of learning with short video for core and elective courses of Moral Education

This model involved MIPs activities such as simulation, action and re-action, singing, appropriate discussion, writing script for following chapter, listen to my opinion, and conclude the idea. All these attractive instructional

activities to permit learning before or mostly after watching the short video. While, elements of moral based on the curriculum mapping by institution. Emotions in humans is all about the character in the short video which is an ideal way to keep students focused.

CONCLUSION

The findings of this study have revealed several favorable effects on the use of video such as how to maintain students' focus on lessons, various techniques that create learning which is fun, and the use of multi-sensory, video shows and effective learning sessions. Hence, instructors are encouraged to choose the appropriate materials to support their teaching especially by integrating the use of video.

ACKNOWLEDGEMENT

The authors would like to express their thanks to Universiti Pendidikan Sultan Idris (UPSI) for the sponsor of the Special University Research Grants (Research code: 2017-0275-107-01). Thanks to all those involved directly or indirectly in this study especially to the management and administration of UPSI, the Research Management and Innovation Centre (RMIC) of UPSI who provided encouragement and comments to further improve this research, and excel in the nation's education. Last but not least, to everyone who were involved in this study.

REFERENCES

1. Abdullah Yusoff., Che Rabiaah Mohamed., Che Noorwani Che Wil., Azhari Muhamood., & Halim Wan Ibrahim. (2013). Pengetahuan tentang Pendidikan Khas dalam kalangan pensyarah pelatih program j-QAF minor Pendidikan Khas. Dalam *Prosiding Seminar Kebangsaan Penyelidikan j-QAF 2013*. Selangor: Universiti Kebangsaan Malaysia.
2. Abdul Halim Tamuri. (2011). Kreativiti dan inovasi dalam pengajaran dan pembelajaran Pendidikan Islam di Malaysia. Dalam *Konvensyen Kebangsaan Pendidikan Islam 2011*. Kuala Lumpur: Universiti Malaya.
3. Ab. Halim Tamuri., & Zarin Ismail. (2006). *Model pensyarah Pendidikan Islam: Konsep 5 mim*. Bangi: Universiti Kebangsaan Malaysia.
4. Afenorain A. Rahman., & Mansor Ab. Rahman. (2013). *Keberkesanan kaedah nyanyian*. Selangor: Oxford Fajar.
5. Ahmad Mohd. Salleh. (2004). *Falsafah, sejarah dan kaedah pengajaran dan pembelajaran*. Selangor: Penerbit Fajar Bakti Sdn. Bhd.
6. Ahmad Nazrin Razak. (2015). *Penggunaan kaedah 'GNP' dalam meningkatkan kemahiran pelajar mengenali dan membaca Mad Silah Thawilah bagi pelajar tahun 4*. Kajian Tindakan tidak diterbitkan, Institut Pendidikan Pensyarah Kampus Ipoh.
7. Alireza, H. (2009). Learning and cognitive styles as effective factors in Learning English for EFL students. *Journal of Learning*, 16 (6), 144-194.
8. Andersson, A., Wiklund, M., & Hatakka, M. (2016). Emerging collaborative and cooperative practices in 1:1 schools. *Technology, Pedagogy and Education*, Vol. 25, No. 4, pp 413-430.
9. Azman Ab Rahman., Norakyairee Mohd Raus., Hussein Azeemi Abdullah Thaidi., & Mohammad Naqib Hamdan. (2014). *Fiqh jenayah orang kelainan upaya*. Negeri Sembilan: Universiti Sains Islam Malaysia.
10. Bahagian Pendidikan Pensyarah. (2004). *Pendidikan khas masalah pembelajaran: Major, modul 2/3 kaedah pengajaran khas Bahasa Melayu*. Kuala Lumpur: BPG.
11. Baharom Mohamad., & Iliyas Hasyim. (2010). *Gaya pengajaran dan pembelajaran*. Kuala Lumpur: PTS Professional.
12. **Borchetta, J., & Dunn, R. (2010). Helping parents understand how children learn. *Journal of Education*, 41(2), 4-13.**
13. **British Ministry of Education. (2000). Teaching students with autism: A resource guide for schools. Victoria: British Columbia.**
14. Burns, R. B. (2000). *Introduction to research methods*. London: SAGE Publications.
15. Cassidy, S. (2004). Learning Styles: An overview of theories, models, and measures. *Journal of Educational Psychology*, 24 (4), 419-444.
16. Dunn, R., & Dunn, K. (1978). *Teaching students through their individual learning styles: A practical approach*. United States of America: Allyn and Bacon.
17. Dunn, R., & Dunn, K. (1992). *Teaching elementary students through their individual learning styles: Practical approaches for grades 3-6*. United States of America: Allyn and Bacon.

18. Ehrman, M., & Leaver, B. (2003). Cognitive styles in the service of language learning. *System*, 31(3), 393-416.
19. Fish, K., Mun, J., & A'Jontue, R. (2016). Do visual aids really matter? A comparison of student evaluations before and after embedding visuals into video lectures. *The Journal of Educators Online*, 13(1), 194 – 217.
20. Foroutan, M., Nooreen, N., Gani, S. H., & Baki, R. (2013). The relationship between language learning autonomy extent and learning styles in Malaysian context. *World Applied Sciences Journal*, Vol. 24, No. 3, pp 395-402.
21. Gagne, N., & Berliner, D. (1991). *Educational psychology (5th ed.)*. Uppersaddle River, New Jersey: Pearson Prentice Hall.
22. Goh Min Lee. (2011). Penggunaan kaedah nyanyian telah digunakan dalam penguasaan sifir darab 6 hingga 8 pelajar Tahun Tiga. *Jurnal Action Research*, 1(2), 20-23.
23. Hardaker, G., Sabki, A. A. (2012). An insight into Islamic Pedagogy at the University of al- Qarawiyyin. *Multicultural Education and Technology Journal*, 6(2), 106-110.
24. Hwang, G., Sung, H. Y., Hung, C. M., Huang, I. (2013). A learning style perspective to investigate the necessity of developing adaptive learning systems. *Educational Technology and Society*, 16 (2), 188-197.
25. Institut Pendidikan Guru Malaysia. (2015). *Panduan umum struktur kursus PISMPambilan Jun 2016*. Cyberjaya: Penerbit IPGM.
- Isotani, S., & De Oliveira Brandao, L. (2013). The roles of teachers and students when facing an interactive geometry software: Igeom. *Bolema-Mathematics Education Bulletin*, Vol. 27, No. 45, pp 165-192.
26. Jabatan Pelajaran Perak. (2013). Rumusan PPKI Perak 2013. Unit Pendidikan Khas JPN Perak.
27. Kementerian Pelajaran Malaysia. (2005a). Modul pengajaran dan pembelajaran amali solat program j-QAF di Pendidikan Khas Masalah Pembelajaran. Kuala Lumpur: Bahagian Pendidikan Khas.
28. Kementerian Pelajaran Malaysia (2005b). Modul pengajaran dan pembelajaran kaedah Iqra' program j-QAF di Pendidikan Khas Masalah Pembelajaran. Kuala Lumpur: Bahagian Pendidikan Khas.
29. Kementerian Pelajaran Malaysia. (2007). Buku panduan instrumen penentuan penempatan Pendidikan Khas Bermasalah Pembelajaran (I.P.P.). Selangor: Jabatan Pendidikan Khas.
30. Kementerian Pelajaran Malaysia. (2012). Buku teks Pendidikan Islam Tahun satu, dua dan tiga untuk pelajar Pendidikan Khas Masalah Pembelajaran. Bahagian Buku Teks.
31. Kementerian Pelajaran Malaysia. (2012). Laporan awal Pelan Pembangunan Pendidikan 2013-2025.
32. Kementerian Pembangunan Wanita, Keluarga dan Masyarakat. (2009). Kategori orang kurang upaya. Kuala Lumpur: Ketua Setiausaha.
33. Kementerian Pendidikan Malaysia. (2004). Pendidikan Khas Masalah Pembelajaran, Modul 2/3 Unit 5/6: Kaedah pengajaran khas Sains. Kuala Lumpur: Bahagian Pendidikan Pensyarah.
34. Kidder, L. H. (1981). *Research methods in social relations*. Tokyo: Holt-Saunders.
35. Laguzzi, J., Bernardi, S., Araujo, A.M., Ventura, A.C., & Vigliano, F.A. (2013). Learning-styles of students of veterinary medicine in the National University of Rosario, Argentina. *Revista Veterinaria*, Vol. 24, No. 2, pp 151-156.
36. La Lopa, J. M. (2013). The difference between Bigfoot and learning styles: There may be better evidence to support the existence of Bigfoot. *Journal of Culinary Science & Technology*, 11(4), 356-376.
37. Levi, U., Einav, M., Raskind, I., Ziv, O., & Margalit, M. (2013). Helping students with LD to succeed: The role of teachers' hope, sense of coherence and specific self-efficacy. *European Journal of Special Needs Education*, Vol. 28, No 4, pp 427-439.
38. Lin Liu, E. Z. F., Chen, Y. L., Liou, P. Y., Chang, M., Wu C. H., & Yuan, S. M, C.
39. (2013). Game-based remedial instruction in mastery learning for upper-primary school students. *Educational Technology and Society*, 16 (2), 271-281.
40. Mahdzir Khalid. (2017, Ogos 9). Utusan Malaysia, 4, Bawa peranti digital ke sekolah.
41. Majda, S., & Helena, C. (2010). Learning habits of pupils with special needs in short-term vocational education programs. *Journal of Educational Studies*, Vol. 36, No. 4, pp 415.
42. Merriam, S. B. (1998). *Qualitative research and case study applicatios in education*. United States of America: Jossey-Bass.
43. Merriam, S. B. (2001). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Pub.
44. Merriam, S. B. (2002). *Qualitative research practice: Examples for discussion and analysis*, CA: Jossey-Bass Pub.
45. M. Ngalim Purwanto. (1990). *Psikologi pendidikan*. Remaja Rosdakarya: Jakarta.

46. Mohd Razimi Husin., Nornajwa Ghazali., & Saidah Haris. (2017). Penggunaan teknik teater terhadap penerimaan maklumat pelajar Pendidikan Moral: Satu kajian kes. Dalam Prosiding Seminar Pendidikan dan Inovasi Kebangsaan Institut Pendidikan Guru Malaysia. Besut, Terengganu: Institut Pendidikan Guru Kampus Sultan Mizan.
47. Mohd Zuri Ghani., & Aznan Che Ahmad. (2011b). Pengantar pendidikan khas. Pulau Pinang: Penerbit Universiti Sains Malaysia.
48. Mohamed Ismail Ahmad Shah., & Yusof Ismail. (2012). Exploring English language learning styles of Malay students at the International Islamic University Malaysia. *World Applied Sciences Journal*, 20(8), 1072-1081.
49. Muhammad Hanif Ab Latiff., & Samsiah Hassan. (2013). Penerapan elemen muzik dan nyanyian dalam konsep penambahan pecahan nombor bercampur dengan penyebut berbeza. *Jurnal Kajian Tindakan: Selangor*. 1(2): 8-10.
50. Noraini Ahmad. (2003). Menguatkan ingatan. Kuala Lumpur: Media Distribute.
51. Noriati A. Rashid., Boon Pong Ying., & Sharifah Fakhriah Syed Ahmad. (2012). Pelajar dan alam belajar. Selangor: Oxford Fajar.
52. Norliza Hussin., Mohamad Sattar Rasul., & Roseamnah Abd. Rauf. (2013). Penggunaan laman web sebagai transformasi dalam pengajaran dan pembelajaran Pendidikan Islam. *The Online Journal of Islamic Education*, 1(2), 58-73.
53. Nor Wahidah Hasim. (2011). Kaedah nyanyian dalam pembelajaran tajuk jenis-jenis makanan. *Jurnal Kajian Tindakan: Selangor*, 1(3): 11-13.
54. Nur Hazirah Razali. (2015). Aplikasi kaedah 'NyaPet' membantu meningkatkan penguasaan hukum tajwid Izhar Halqi dalam kalangan pelajar tahun 5. (Laporan Penyelidikan Tindakan yang tidak diterbitkan). Institut Pendidikan Pensyarah, Kampus Ipoh.
55. Othman Lebar. (2009). Penyelidikan kualitatif: Pengenalan kepada teori dan metod. Tanjong Malim: Universiti Pendidikan Sultan Idris.
56. Roesler, R. A. (2017). Independence pending: Teacher behaviors preceding learner problem solving. *Journal of Research in Music Education*, Vol. 64, No. 4, pp 454-473.
57. Suhana Udin. (2009). Meningkatkan kemahiran mengingat huruf Idgham Maal Ghunnah menggunakan kaedah ilustrasi kartun, pergerakan dan nyanyian. (Laporan Penyelidikan Tindakan yang tidak diterbitkan). Institut Pendidikan Pensyarah, Kampus Ipoh.
58. Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, Calif: Sage.
59. Standard Pensyarah Malaysia. (2009). *Bahagian Pendidikan Pensyarah, Kementerian Pelajaran Malaysia*. Putrajaya.
60. Sze, S. (2009). Learning style and the special needs child. *Journal of Instructional Psychology*, 36(4), 360-362.
61. Yin, R. K. (1994). *Case study research: Design and methods*. Newbury Park, CA: Sage.
62. Yin, R. K. (2003a). *Applications of case study research (2nd ed.)*. Thousand Oaks, California: SAGE Publications.
63. Yin, R. K. (2003b). *Case study research: Design and methods (3rd ed.)*. Newbury Park, CA: Sage.
64. Yin, R. K. (2009). *Case study research: Design and Methods (4th ed.)*. Los Angeles: SAGE Publications.
65. Zainul Ishak. (2006). *Panduan kesihatan dan keselamatan kanak-kanak*. Selangor: Loh Print.
66. Zhang, L., & Sternberg, R. J. (2005). A threefold model of intellectual styles. *Journal of Educational Psychology*, Vol. 17, No. 1, pp 10.