

DEVELOPMENT OF CAREER INTEREST AND MULTIPLE INTELLIGENCE MODULE FOR MUSLIM GIFTED AND TALENTED STUDENTS

Amirah Zainunⁱ , Rezki Perdani Sawaiⁱⁱ & Amnah Zanariah Abd Razakⁱⁱⁱ

*ⁱⁱ(Rezki Perdani Sawai). Senior Lecturer, Universiti Sains Islam Malaysia. email: rezki@usim.edu.my

ⁱ Faculty of Leadership and Management, Universiti Sains Islam Malaysia.
amirahzainun@usim.edu.my

ⁱⁱ Faculty of Leadership and Management, Universiti Sains Islam Malaysia. rezki@usim.edu.my

ⁱⁱⁱ Kolej GENIUS Insan, Universiti Sains Islam Malaysia. amnahz@usim.edu.my

Abstract

Gifted and Talented Student (GTS) refers to student with diverse potential and vary in term of their nature and abilities. Despite of privileges having multiple abilities, GTS often faces challenges in identifying and pursuing a career path that aligns with their diverse interests and abilities which referred to as multipotentiality. Various related studies have been conducted by previous researchers, both quantitatively and qualitatively, but less reference has been made to intervention studies on module development. Hence, this research is attended to develop a module in assisting GTS with their career decision. The basic foundation in developing this module are based on two theories namely Holland RIASEC Theory (1997) and Gardner's Theory of Multiple Intelligence (1999). The sample of this study consist of GTS from one of the Gifted High School in Negeri Sembilan. This study will adopt the design and development research (DDR) and guided by the ADDIE model. Phases in ADDIE Model involved in this research are need analysis, design phase, development phase, implementation phase and evaluation phase. This module will be conducted by falitators in assisting students in making career decisions. It is hoped that this study will provide guidance in supporting career aspirations among GTS and help expanding students' potential.

Keywords: *gifted and talented, career interest, multipotentiality, multiple intelligences*

INTRODUCTION

Education system plays an important role in shaping future generations and leaders. As Malaysia becomes a developed country, grooming top talents become increasingly important. On September 2012, Ministry of Education (MoE) Malaysia has launched Malaysia Educational Development Plan 2013-2025 that outlines one of the critical directions in this plan is to constitute a national strategy of education for gifted and talented students. According to Gagne (2014), Gifted and Talented Students (GTS) are those whose potential is distinctly above average in one or more of the following domains of human ability, in intelligence, creativity, sociability and physical health. GTS often display advanced cognitive abilities and enabled them to excel in various areas of study. GTS may have a strong desire to explore diverse field and engage in a wide range of activities.

Having a wide range of abilities and interests often causes GTS to face an issue known as multipotentiality. Researches have shown that GTS undergoes unique experiences and high challenges in exploring and planning their career path due to multipotentiality issues (Chen & Wong, 2013; Greene, 2002). Eventhough multipotential open up a variety of career option due to the multiple abilities owned by GTS, abundance of options may also lead to indecision and difficulty in committing to one particular career. As career decision is a critical process for most students especially GTS, it shows that GTS require an assistance in planning their career pathway that suits with their talents and abilities. Following that, this study propose to develop a module in assisting GTS with career decision.

CAREER INTEREST AMONG GTS

GTS with multipotentiality are struggle to identify a career path that allows them to utilize all of their strengths and interests leading to indecision and uncertainty. GTS with wide range of interests and talents always find it challenging to narrow down their career options to a single path as they may feel torn between pursuing different passions and struggle with making a definitive choice. GTS may also fear of missing out on opportunities or regretting their career choices. They may worry that by pursuing one career may neglecting other areas of interest, leading to feelings of uncertainty and dissatisfaction

In helping GTS identifying their career interest, a few career interest theory can be referred to. The most commonly referred theory is a theory developed by John Holland, known as Holland RIASEC theory (1997). This theory has been widely used in career counseling and guidance, and it can be particularly helpful for individuals who have multiple interests and talents. According to the theory, personalities and work environments can be classified into six categories which are realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C). These personality types correspond to various work environments, and individuals can use this theory to identify which work environments match their interests and strengths. One of the strengths of Holland's theory is that it emphasizes the importance of matching individuals with work environments that align with their interests and personality traits. This approach can be helpful for gifted students as they may have unique needs when it comes to work environments. Thus, by exploring these personality types GTS can gain a better understanding of their strengths and limitations. This can be helpful in setting realistic career goals and making planning on educational and career paths.

MULTIPLE INTELLIGENCE AMONG GTS

In exploring career paths among GTS, identifying personal strength and intelligence is important. Different types of intelligences may play a role in determining career

interest and aptitudes. According to Gardner (1999), there are nine types of intelligence which are Linguistic Intelligence, Logical-Mathematical Intelligence, Musical Intelligence, Spatial Intelligence, Bodily-Kinesthetic Intelligence, Naturalist Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence and Existential Intelligence or Spiritual Intelligence where GTS will be more interested in careers that aligns with their dominant intelligences.

GTS who are known for their exceptional abilities and potential, often exhibit strengths in one or more of Gardner's multiple intelligences. The concept of multiple intelligence is particularly relevant to gifted students because it acknowledges and validates their diverse talents and areas of exceptional ability. Different intelligences are associated with different career fields, and GTS may be particularly talented in certain areas, making them more likely to pursue careers in those fields.

For example students with high spatial intelligence were more likely to be interested in STEM fields, while those with high linguistic intelligence were more likely to be interested in communication or writing careers. (Gubbins & Siegle, 2018). Another study by Chiu & Chen (2015) also found that students with high linguistic intelligence are more likely to express interest in careers related to communication, writing, and journalism.

In brief, multiple intelligences can play a significant role in shaping career interests and aptitudes among GTS, unfortunately, limited studies are focusing on the integration of these two theories, especially in gifted education. Hence, a study integrating these two theories can be done to help GTS with multipotentiality issues in planning their future careers based on their intelligence.

MODULE DEVELOPMENT USING ADDIE MODEL

The development of the module is adopting a Design and Development Research (DDR) approach using ADDIE model and mixed method model. ADDIE stands for Analysis, Design, Development, Implementation, and Evaluation, and each phase represents a critical step in the instructional design process. There are three major phases in ADDIE Development model which are (1) Need Analysis (2) Design and Development (3) Implementation and Evaluation. Based on the different purposes of each phase, various data collection methods are used in determining the study methodology.

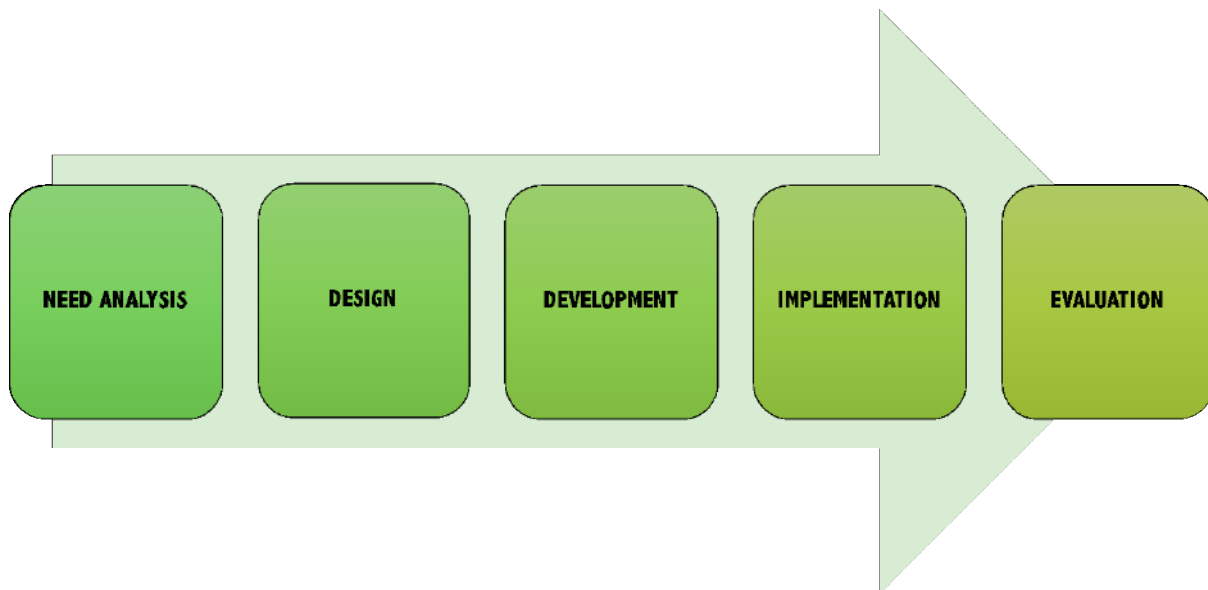


Figure 1: Design and Development Research (DDR) using ADDIE Model

According to Richey and Klein (2007) and Saedah et al. (2013), the study of module design and development focuses on the product development process which involves several phases and each phase uses a different methodology for the purpose of data collection.

In the need analysis phase, information about the requirements and specifications of the module is obtained from the user's point of view, which is before the module is developed. According to Richey and Klein (2007), the purpose of need analysis is to determine product specifications. Throughout this phase, researcher will collect information on the needs of the module from the target user and identify the elements needed in this module's development. Consequently, a needs analysis study is critical in determining the appropriate product to develop in order to solve issues among GTS.

The second phase, which is the design and development phase, involves the planning, development and evaluation content of the module and evaluation of the appropriateness of module development. In this phase, the validity and reliability of the module will be evaluated. At least six experts need to be involved in the validity process for the contents of the module. Experts selected by purposive sampling who have a heterogeneous field background (various fields) and have more than five years of work experience will be chosen to provide feedback from diverse perspectives (Shahlan 2012). The selection of a line of experts from various fields will help to provide constructive comments and suggestions to improve the content of the module before this module is used in the implementation of the actual experiment. The chosen

Experts for this study involving experts from Counselling field, Gifted Education and Special Need Education.

The implementation and evaluation phase, which is the last phase of the study, will be testing the usability of the module in the actual training context. This phase will involve 30 GTS to measure the usability of the module using the USE instrument. The next step for evaluating module's usability is to use the interview method. Interviews is conducted to explore and enrich the findings of the usability study. These interviews will be conducted with student respondents (student-focused interviews) as users and also conducted with teachers (act as facilitators) who run the module. The selection for the respondents of this study is selected based on purposive sampling by conducting individual interview sessions to obtain information.

THEORETICAL APPROACH IN MODULE DEVELOPMENT PROCESS

This module was developed on two approaches, particularly the Psycho-Spiritual Counseling Theory approach and the Cognitive Behavioral Model approach;

a. Holland RIASEC Theory (1997)

Holland's theory and research have contributed in innumerable and significant ways to the field of psychology, by helping to generate core knowledge related to career development, assessment, and practice (Nauta, 2010). The first theory developed by John Holland in 1958 is a theory of vocational personalities and work environments that consist of six types of career preferences namely motoric, intellectual, esthetic, supportive, persuasive, and conforming.

In 1997, he later change the theory into RIASEC Thoery. According to this theory, personalities and work environments can be classified into six categories: realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C). As a result, individuals frequently seek out environments in which to express their interests, abilities, and values. According to Holland (1992) factors which influence career choices and the influences found to be important is; family; peers, teachers and other adult role models; school, work, and leisure experiences; and socio-economic status and ethnic background. Holland's theory is an interactive model based on a typology of persons and environments. Individuals can be characterized by different personality types and the environments in which those people live, and work can be classified by the same types.

b. Gardner Theory of Multiple Intelligence (1999)

Gardner (1999) defines intelligences as an individual's ability to create a product that is valued in one or more cultures; the ability to devise effective solutions to real-time problems; and the ability to discover new or complex problems that must be solved.

According to Gardner's theory, paying equal attention to each type of intelligence will help the recognition of sources of strengths, weaknesses and divergent abilities of each individual. Gardner initially identified seven distinct ways people learn and comprehend reality by employing eight criteria. Linguistic, Logical Mathematical, Visual Spatial, Bodily Kinesthetic, Musical, Interpersonal, and Intrapersonal are the seven intelligences. Gardner has reviewed the evidence for two additional attributes, naturalistic and existential or spiritualism, over the last two years and declared that they also meet the criteria for intelligences.

Gardner theory of Multiple Intelligence has been referred and used by many studies involving various level of education including GT education field. According to Gardner's theory, paying equal attention to each type of intelligence will help the recognition sources of strengths, weaknesses and divergent abilities of each individual. Most of the literature related to Multiple Intelligence and GT students are concerning on the implementation of multiple intelligence in classroom or curriculum for gifted learners' identification process. There are also an empirical study focusing on correlation of Multiple Intelligence with other traits namely learning style, academic achievement and self-efficacy. Above all the studies, intervention studies involving module development are still lacking concerning multiple intelligences in determining career interest among GT students.

CONCLUSION

As a conclusion, the development of career interest and multiple intelligence module for GTS is hoped to provide a wealth of information that should be emphasized in the development of the gifted and talented education field. This is critical in order to help individuals reach their full potential. In relation to that, the theory that has been expressed in this study is necessary to explain the important elements that need to be emphasised in the development of the module. With a clear research basis, this study is expected to be able to contribute to the desired results as planned. Therefore, it is hoped that the innovative alternatives in this module can help GTS in the process of understanding and making career choices.

REFERENCES

Book

Holland, J.L. (1997) Making vocational choices: a theory of vocational personalities and work environments. 3rd Edition, Psychological Assessment Resources, Odessa.

Gardner, H. (1999). Intelligence Reframed: Multiple Intelligences for the 21st Century. New York: Basic Books.

Journal

Chen, C. P., & Wong, J. (2013). Career counselling for gifted students. *Australian Journal of Career Development*, 22, 72-81.

Chiu, Y. L., Tsai, H. M., & Chen, W. P. (2015). The relationship between multiple intelligences and career interests among high school students. *Journal of Career Development*, 42(1), 23-34.

Gagne, F. (2014). Academic talent development within the DMGT-CMTD framework. International Conference for Gifted and Talented Education (IC-GATE). PERMATAPintar National Gifted Centre. Universiti Kebangsaan Malaysia. 8-10 December 2014.

Gubbins, E. J., & Siegle, D. (2019). Gifted education research: Its impact and future directions. *Psychology in the Schools*, 56(7), 1189-1201. <https://doi.org/10.1002/pits.22293>

Richey, R. C., Klein, J. D. & Nelson, W. A. (n.d.). 41-DEVELOPMENTAL RESEARCH.pdf.

Saedah Siraj, Norlidah Alias, Dorothy DeWitt, & Zaharah Hussin. (2013). Design and developmental research: Emergent trends in educational research. Pearson Malaysia.

Shahlan Surat. 2012. (*Keberkesanan Strategi 4-Meta Dalam Penulisan Karangan Bahasa Melayu Pelajar Tingkatan 4*). Universiti Kebangsaan Malaysia.

V.Kail, R. 2016. (*Children and thier development*) hlm.7th Edisi . Edinburgh Gate, England: PEARSON.

Nauta, M. M. (2010). The Development, Evolution, and Status of Holland's Theory of Vocational Personalities: Reflections and Future Directions for Counseling Psychology . *Journal of Counseling Psychology* , 57 (1), 11-22.