Development of Integrated Holistic Teaching Guide Module for Technical and Vocational Education Teacher Trainees

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Abstract
The development of quality human capital is a process of transforming humans potential; knowledgeable, honorable, skilled and resilient. The failure to develop quality human capital can inhibit a lot of country potential growth. Without quality human capital, the country will turn into declined, even a civilization might be impaired. Success teachers who able to explore and disseminate knowledge, daring to try something new, creative and innovative, and have superior personal qualities, through their teaching and learning (T&L) in developing a critical mentality generation is the critical success factors in shaping a bright future generation. Therefore, through this research, the ‘Integrated Holistic Teaching (IHT) Guide Module’ had been developed to provide awareness and appreciation among Technical and Vocational (TVE) teacher trainees on the importance of IHT approach. This holistic approach focuses on the application and the instillation of the ‘Belief and Devotion to God’ (BDG) value in the T&L of TVE subjects, without disturbing the existing syllabus objectives. Three modules expertise had been appointed and agreed to be responsible for checking the modules content, answer the questionnaire of module validity and lastly, give comments on module content which had been developed based on Russel Model of Module Development 1974. Finally, data analysis was performed using the Tuckmen and Waheed validity formula which showed a high level of 94.67 %. Thus, the BDG values in T&L has been translated well in the form of modules. In other words, the development of IHT guide module meets the Malaysian National Education Philosophy (MNEP) goals, to create a balance and harmonious humans intellectual, spiritual, emotional and physical which based on the BDG values.

Keywords: Teachers quality, teaching modules, Integrated Holistic Teaching Approach, ‘Belief and Devotion to God’ value

1. Background of Problem
The excellence of education is directly proportional to the quality of teachers’ Teaching and Learning (T&L) process. As enshrined in the Malaysian Teacher Standards 2007, teachers competency is refer to how teachers influence and give impact to students via their T&L. Hence, in order to produce students who are competent and visionary, the focus should be given to teachers T&L process. According to Asmah (1989), the ‘Belief and Devotion to God’ (BDG) value should be instilled in the T&L of every subject to strengthen the teaching output, which not only emphasizes the enhancement of intellectual, even infuse the superior personal qualities. The statement explained that the application of the BDG values is no exceptions to any subject, including the TVE subjects and will give a positive impact to development of students.

Zahra Al Zeera (2001) asserts that there is no difference among every field because everything including knowledge is begins and ends with the name of the Lord. Thus, there is no issue to be raised and disputed in order to apply the BDG value in the T&L of TVE subjects. According to Zahra Al Zeeras’ experience during her completion in doctoral research, the BDG value make her feel always be protected and respected. In other words, it can be concluded that the absence of BDG value in the individual of teachers will makes them live in unrest situation, always feel overburden and do not know the real purpose of the educational that needs to be reached during T&L process; search the truth that leads students to the grandeur and majesty of the Creator.

The BDG value guide individuals to own universal world-view which are importance as a references to face every questions of life, evaluate every action and make rational judgments to solve the problems of life, so as to give meaning to the intellectual knowledge learned (Ary Ginanjar, 2001). In line with Sidek (2006) who stated that in order to ensure well self-management, humans require two fundamental skills. Firstly is character development (intellectuals, either scientific or technical and vocational), and secondly is personal development (human value). The integration of both character and personal development which is rooted to the BDG value is the alternative answer to the lacking of education system quality (Sidek, 2011). According to Shahibuddin (2006), Al - Ghazali had pointed out that intellectual knowledge and the BDG value are two things that are mutually connected. The BDG value can’t be understood without knowledge of the intellectual. Furthermore, intellectual knowledge is nothing without the BDG values. Osman (1992) stated that when the intellectual knowledge was separated with the BDG values, the knowledge system will be destroyed. In
other words, people will abuse and manipulates knowledge for unethical things of human life. Blessings intellectual knowledge is the survival of the individual nature of obedience to the owners of knowledge (Shahibuddin, 2006). As explained in the following verse:

“We will soon show them Our signs in the Universes and in their own souls, until it will become quite clear to them that it is the Truth. Is it not sufficient as regards your Lord that He is a Witness over all things?”

Surat al-Fussilat 41:53

“He will say: Even so, Our communications came to you but you neglected them; even thus shall you be forsaken this day.

Surat Taha 20:126

Human capabilities were limited. Despite trying harder to get something, the results will be determined by the nature of God as all content including man is belong to God. In the context of T&L, according to Shahibuddin (2006), as long as the development of intellectual knowledge was integrated with the BDG value, then the function of T&L will be effective, yet the goals of the individual, society and the state also can be achieved. Therefore, the T&L using IHT approach is a necessity to improve the quality of teacher trainees’ teaching and had been translated into modules that can be easily recall, be a guide and be more practical.

Module is seen as one of the preferred medium in order to fulfilled T&L necessity and organization training. Nowdays, the uses of modules are growing and increasing rapidly. Therefore, modules developer are now getting excited trying to design a module without many knows that the construction of the modules are tough, need more time and have to follow certain particulars.

Looking at the market today, many modules have been produced by organizations or individuals. However, there were some module that have been developed and applied, didn’t followed the module development process and didn’t go through a proper assessment. Therefore, this will make it less valuable and questionable on its effectiveness. It was recognized by Sidek and Jamaluddin (2005) that a module to be developed should include a variety of rules and procedures that must be followed so that the module can really bring the best effect. This means that the success of the module is very dependent on the procedures to be followed by modules developer.

In order to develop a module, there are a few model of modules development process that can be referred, such as Sidek and Jamaludin model 2005, Sharifah Alwiah model 1984, Meyer model 1988 and model from Rusell 1974. Sharifah Alwiah (1981) recommends that the development of the module should considered the needs of the target groups and their capacity, concepts and skills presented. Clearly then, the development of modules needs to adhere to the model of modules development in order to improve the performance or quality of the output.

2. Problem Statement
The proliferation of knowledge that rejected the BDG value via T&L processed, will producing a materialistic human who only struggle for the world, whereas the Hereafter is our eternal life (Sidek, 2006). Therefore, strengthening the intellectual knowledge by instilling the BDG values through T&L process or IHT approach is a necessity. The aims of this IHT approach is to make them clear and understand the true meaning of human life, why human is create and their true responsibility that should be done to themselves, other people and the environment. With this understanding, students will realized what should be done and what shouldn’t be done. In other word, they have clear direction to be success in their life in this world and the hereafter.

Sidek (2006), the BDG value become barriers for individuals to do bad things. By applying this IHT approach, teacher trainees will live in peaceful situation, will not feel burden and will find out the real purpose to be achieved during the implementation of teaching which aim to help students discover the truth by recognizing the greatness of the Creator. This is important because according to M.Naquib Syed Al-Attas in Wan Mohd Nor (2005), confusion and disorientation continually occur at various levels of leadership if knowledge are continue to be taught separately.

As a solution, a module that explains how intellectual knowledge is integrated with the BDG values in T&L process or IHT approach was required for the purpose of improving the quality of the TVE trainee teachers. This module must be able to give an appreciation and awareness of the importance of BDG values in T&L process or IHT approach, and not deviate from the educational goals as set in the Malaysian National Education Philosophy (MNEP). Therefore, the developing of IHT Guide Module in this study had going through a structured plan to make sure the functions of module is coincidental with the needs of good modules, well acceptance and not in doubt.

3. Objective
This study aimed to develop the IHT guides module, in order to improve the quality of the TVE teacher trainees T&L. Therefore, the following research questions were presented:
i. What is the design of IHT guides module?
ii. What is the validity of IHT guides module?

4. Methodology

4.1 Research Design
This study is a qualitative descriptive type which according Sidek (2002), the purpose of descriptive study is to provide a systematic explanation of the facts and features of an area.

4.2 Sampling
Three modules expertise have been appointed and agreed to be responsible for checking the modules content, answer the questionnaire of modules validity and lastly, give comments on modules content which have been developed based on Rusells’ Model of Module Development 1974. The experts are:

i. Prof Dr Jamaludin bin Ahmad,
   Professor, Faculty of Education, Universiti Putra Malaysia.

ii. Dr Mazlan Aris,
   Senior Lecturer, Teacher Training Center, Temenggong Ibrahim Campus.

iii. Dr Baharudin bin Yaacob,
   Excellent Senior Lecturer, Teacher Training Center, Sultan Abdul Halim Campus.

4.3 Instrument
Questionnaire was used for the purpose of obtaining validity of IHT guides module which is developed based on the Rusells’ Model of Module Development 1974 (Figure 1).

![Rusell Model of Module Development (1974)](image)

According to Rusell (1974), a module has a good content validity when the module has the following conditions:

i. It covers the targeted population; which means the module has been developed in accordance with the background aspects and the behavior of the subjects in the research.

ii. The module has been implemented during a normal and satisfactory situation.

iii. Time allocated to the individuals to complete the module was sufficient and appropriate.

iv. The performance of the individual was enhanced after the completion of the module.

v. There was an attitude change towards betterment after the completion of the module.

4.4 Data Analysis
The result of the questionnaire is based on a five-point likert scale. Therefore, as suggested by Jamaludin (2002) to determine the validity of the content of the modules, the researcher will use the following formula:

\[
\text{Level of Validity Achievement} = \frac{\text{Total of experts score}}{\text{Total score}} \times 100\%
\]

Referring to the formula of validity level in Tuckmen and Waheed (1981), the IHT guide module is confirm having a high content validity if obtain the 70% and above, and is presumed achieved the level of high validity.
5. Finding
5.1 Design of Integrated Holistic Teaching Guide Module
The IHT guide module is categorized under training module. The form of training modules aimed to develop competence employees. The facilitators are needed to operate the modules in the form of short courses or long-term so that the implementation of this module is to achieve the objectives set. The details of IHT guide module developing are as follows;

5.1.1 The IHT Guide Module Concept
The IHT guide module is developed based on the concept shown in Figure 2 and IHT Model in Figure 3 which had been developed by researcher and, had been reviewed and endorsed by five experts in related field. The IHT guide module concept in Figure 2 explains that the conventional teaching approach that only focuses on the objectives of syllabus, are successfully increased the intellectual knowledge and skills, but not the human value. While, the IHT approach which does not separate the intellectual knowledge with the BDG value have a potential to improve the essential elements of education according to the MNEP; the intellectual knowledge, skills and the human value. Therefore, the IHT guide module was developed to provide exposure and appreciation of the importance of IHT approach in T&L.

Referring to IHT model in Figure 3, when the BDG value was set as a fundamental role in planning the T&L, the implementation of T&L can only be carried out by the facilitators. The process of delivering and transferring this knowledge will bring positive transformation to human intellectual, skills and human value development.

5.1.2 Development Process of Integrated Holistic Teaching Guide Module
The development process of IHT Guide Module was started after getting confirmation from the experts on IHT model. This is important because the module to be developed is a translation of the concept of the IHT model. Then, the discussion with supervisor was held to determine the concept that will be applied through modules. This module emphasizes the application of BDG value in T&L process. According to Jamaludin (2002) module development should consider the abilities and intelligence of the targeted population, the concepts, principles and instilled skills. This is to ensure that the module later can truly reflect the needs of the respondent and to achieve its development objectives. Thus, the researchers discussed with supervisor about the types, principles and content to be loaded in the module that are relevant to the potential of target.
The fully developed module was scrutinized before being appointed to the module expertise who are responsible to check the module contents. If they feel unsatisfied with the module, so the module will be refined based on the results of discussion with them. After the correction was done, the module will be re-reviewed by module expertise until they satisfy with the content of the module. Then, the experts will answer the questionnaire of module validity and lastly, gave comments on module contents which have been developed based on Rusell Model 1974. This IHT guide module has been through this stage for three cycles before the module expertise really satisfy and ready to validate the module.

Further, the IHT guide module was brought to the language expert who was appointed to review the modules grammar. The correction will be done based on experts review. After that, this module was brought back to the language expert to review the aspects of grammar and then validate it.

After completing the modules validity of content and grammar, the module is ready to be tested on reliability. The data will be analyzed to find out the level of reliability and Cronbach Alphas’ value. If the value obtained < 0.6, then the activity should be examined and repaired. On the other hand, if the value gained > 0.6, it can be concluded that the module is ready to review its effectiveness through true-experimental methods.
Figure 4 shows the process involved in testing the validity and reliability of the IHT guide module.

5.1.3 Principle of Integrated Holistic Teaching Guide Module
The principle of module is a fundamental that lead to the modules objective. Based on Kamarudin (1990), there are three stages in module learning process (refer Figure 5).

Figure 4: Process of IHT Guide Module Development

Module learning process in Figure 5 clarifies that information can stimulate the participants to act (speaking, writing, etc.) in spot which will be known right or wrong, just after the participant response. According to Kamarudin (1988) in Sidek and Jamaluddin (2005); Mohd Yusof (1993) to complete a module, the principles of module development should be aligned with the elements of excellent learning and effective, as follows:

i. Appreciate the educational goals
Module Learning will be effective if respondents have high motivation

ii. Careful planning
   Content of modules are arranged in a logical, structured and there are relationship between activities.

iii. Realizing the skills element
   Not corrupted by too much material at one time.

iv. Ethical and moral
   Learning of modules is not done under desperation.

v. Effective assessment methods
   Results obtained immediately improve learning interests.

Table 1 shows the principle of IHT Guide Module

<table>
<thead>
<tr>
<th>No.</th>
<th>Principle of IHT Guide Module</th>
<th>Explanation</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Appreciate the educational goals</td>
<td>The ultimate goal of this module is to achieve MNEP. Students will understand the essence of the MNEP which aims to develop students who are balance in physical, emotion, spirit and intellect, based on the BDG value. This will motivate the teacher trainees to be more passionate in their T&amp;L process.</td>
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<th>Principle of IHT Guide Module</th>
<th>Explanation</th>
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</table>
| 2   | Careful planning | The content of activities in this module are structured based on the structure model by Al-Ghazali (Yatimah and Mohd Tajudin, 2011):
   i. Identification and build relationships
   ii. Self and problem exploring
   iii. Identify the source and type of problem
   iv. Give appropriate medication to disease
   v. Evaluation
   The logic structured module, can be easily carried by the facilitator and well received by teacher trainees. Each part of the module connected to each other. In addition, a variety of activities in the module not sicken facilitators and teacher trainees. |
| 3   | Ethical and moral | The implementation of this module is not carried out under desperation because it is moved according to allocated time interval. This will facilitate the delivery and instilment of knowledge and the understanding will be more harmonious without compulsion. |
| 4   | Realizing the skills element | The development of this module is considers the efficiency and ability of teacher trainees as individuals who certainly has the potential to easily understand the knowledge presented. However, to ensure the smooth running of this learning event, the activities included in the module is not too dense, but it is able to achieve the planned objectives. In other words, the teacher trainees were not bribed with too much material at one time so that they are clear and communicated knowledge impressed. |
| 5   | Effective assessment methods | Reaction of teacher trainees in each activity will be known right or wrong just after they completed each activity. The explanation for each reaction will be described for a better understanding and knowledge of teacher trainees. After that, the teacher trainees will be exposed to the next activity. |

In terms of the principles of module, IHT guide module had been developed based on right principles of modules.
The IHT guide module specially developed for TVE trainee teachers to improve their quality of T&L which can’t be separated with the BDG value. This module emphasizes trainee teachers’ responsibility to themselves, people (students) and the environment, based on the responsibility to God.

5.1.4 Features of IHT Guide Module
In developing the IHT guide module, researcher had established the characteristics of the module based on Kamarudin (1990) and Meyer (1988), to ensure that these modules are really strong. Figure 6 shows the characteristics of IHT guide module.

![Figure 6: Characteristic of IHT Guide Module (Modified from Kamarudin, 1990 and Meyer, 1988)](image)

5.1.5 Content of Integrated Holistic Teaching Guide Module
The IHT guide model was developed by the researcher after modifications of several theories and models. The IHT model is considered appropriate to be applied by TVE teacher trainees in their T&L process. Socialization submitted by the model is to prioritize the BDG value in teaching by fostering awareness of the leadership responsibility as self-changes because of the Creator, build good social relationships with others because of the Creator and maintain the beauty of the living environment as well because of the Creator.

The IHT guide model also emphasizes the role of the heart, spirit, soul and mind in order to implement quality T&L impact on students, without disturbing the original objectives of the TVE subject syllabus. On the other hands, this approach would allow to strengthen the understanding, intellectual and spiritual development of students simultaneously.

Researcher had named this module as the IHT guide model in accordance with the concepts introduced by this module that integrates intellectual knowledge with the BDG value in the T&L process. The specific objective of this module is to enhance the quality of the TVE teacher trainees by fostering awareness of responsibility for themselves, people (students) and the environment based on the will of the Creator. Based on the activities available in the module, it appears that all activities can lead TVE teacher trainees to know their-self; returning to the nature of creation, and thus make them more responsible in T&L process as enshrined in the MNEP.

5.2 Validity Of IHT Guide Module
For content validity of IHT guide module, three experts were consulted. According to Majid Konting (2004), the content validity of the modules can be measured through assessment by experts in the field. Table 2 shows the experts proposed recommendations to improve the function of module.
Table 2: Experts Suggestion

<table>
<thead>
<tr>
<th>Revise Stage</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- Fix module configuration format and need to be special title of module development and teaching</td>
<td>- Fix module configuration format and need to be special title of module development and teaching</td>
<td>- Fix module configuration format</td>
</tr>
<tr>
<td></td>
<td>- Lack of clear objectives</td>
<td>- Ensure that the objectives can be measured</td>
<td>- Order module should be structured and standardized</td>
</tr>
<tr>
<td></td>
<td>- Check the content of the proposed</td>
<td>- Align the objectives and activities</td>
<td>- Remove inappropriate activity</td>
</tr>
<tr>
<td></td>
<td>- User activity should be clearly</td>
<td>- Need to put a philosophy that is appropriate for each activity</td>
<td>- Language to be strong and clear</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>- Check the content of the proposed</td>
<td>- Objective still unclear</td>
<td>- Check the objective</td>
</tr>
<tr>
<td></td>
<td>- Fix spelling, punctuation and important solutions to the comments given</td>
<td>- User activity there is still a lack of clarity</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Satisfied</td>
<td>Satisfied</td>
<td>Satisfied</td>
</tr>
</tbody>
</table>

Once satisfied, experts agreed to answer the questionnaire of modules validity. The calculation of the modules validity is as follows:

<table>
<thead>
<tr>
<th>Expert</th>
<th>Experts total score</th>
<th>Module Validity Achievement According Expert (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>X</td>
<td>21/25 * 100% = 84</td>
</tr>
<tr>
<td>B</td>
<td>Y</td>
<td>25/25 * 100% = 100</td>
</tr>
<tr>
<td>C</td>
<td>Z</td>
<td>25/25 * 100% = 100</td>
</tr>
</tbody>
</table>

Module Validity Achievement According Experts = (84 + 100 + 100) / 3
= 94.67% ≥ 70%

The analysis of the score by three experts shows 94.67%. This value indicates that the module is a high-level verification.

6.0 Discussion

The results prove that the IHT guide module has a high level of validity as the value obtained 94.67% is above 70% as prescribed in the use of the Tuckmen and Waheed validity formula. In other words, the instillation of BDG value had been translated well in the form of modules. The finding is consistent with Trochim (2006) who states that validity refers to how accurately a concept, idea or attitude translated into reality.

Satisfactory of validity, explains that the module meets the criteria of Rusell model of module development (1974); covers the target population, implements during a normal satisfactory situation and appropriate time allocation. In addition, the IHT guide module capable to improve the self-quality of TVE teacher trainees that leads to a change in attitude towards excellence.

The high validity of this module was influenced by the procedure that had been followed. As stated in Drost (2011), expertise involved in the stage of content review will improving the level of module validity and confirming the consistency of instrument. The module will be reviewed and re-reviewed by module expertise until they satisfy with the content of the module. The IHT guide module has been through this stage for three cycles before the module expertise really satisfy and ready to validate the module. Satisfied in the context of this study is recognize that the module meets the objectives of development and the potential to function as planned. Following are the expertise opinion on IHT guide module.

“Congratulations on such a module”

“Expert X

“This module can be implemented well. Content of modules are available to meet the target and may contribute to a change of attitude in the performance of T&L”

Expert Y
“After review and revise this module, I am very satisfied and confirm the content of this module can be used for the proposed study”

Expert Z

“Overall, grammatical errors of this module is minimal. Some spelling errors have been detected and have been corrected”

Language Expert

Based on the views presented by module and language experts, it can be proved that the development of IHT guide module has been developed in a structured manner according to proper procedure module. The module development also achieved the module objectives; to provide an appreciation and awareness of the importance of BDG value in teaching or IHT approach. Modules scientifically evaluation is important to ensure the quality, promoting modules quality to a high level and considered effective (Mazlan, 2010).

7.0 Recommendations and Conclusion

Based on the results obtained from the research on the IHT guide module, below are a few recommendations especially for Ministry Of Education and researcher for further research in this area.

1. As it clearly shows that this module has high validity, further research on the reliability and the effectiveness of this module is strongly recommended. If it shows a result of high reliability and effectiveness, it is strongly recommended to be implemented wholly by all teachers training institute run by the government or private sectors.

2. The use of Tuckmen and Waheed validity formula as suggested by Jamaludin (2002) has proven modules validity. Therefore researchers and module developers are strongly recommended to use this formula to determine the validity of modules.

3. As the criteria in this module building as suggested by Rusell (1974) is appropriate, it is highly recommended to be used as a guide by researcher when new modules are explored in this field or others in the future.

4. The steps that researcher use in the process of developing a module (see figure 4) is well structured and help researcher to manage the module development fluently, it is highly recommended to be used as a guide by researcher when new modules are explored in this field or others in the future.

5. The TVE trainee teachers gave positive feedback when they were exposed to the IHT approach. Further research are recommended in this IHT approach.

The research conducted successfully has contributed in developing the IHT guide module for TVE teacher trainees. Although this module is designed for TVE teacher trainees, it still could be a guide to other teacher trainees and teachers. It is hoped that this module would provide some form of contribution to those involved directly or indirectly in T&L.

References


Sharifah Alwiaw Alsagoff (1981). *Pengenalan pengajaran individu dengan tumpuan khas kepada modul


