Development of Health Education Learning Module in Bac.TSE-LDPE Programme in TTI: Needs Analysis Study

Alijah Ujang [1], Norlidah Alias [2], Saedah Siraj [3]

ABSTRACT

This study is to explore the need to develop learning modules of health education for trainee teachers in the Bachelor Of Teaching (Hons)(Special Education-Learning Disabilities For Primary Education) Programme (Bac.TSE-LDPE) in the Teacher Training Institute (TTI). The questionnaire uses the Likert scale with the close ended questions analysed by percentage while open ended questions are analysed by theme. The questionnaire, piloted on 20 trainee teachers of the January 2009 TTI intake, had a Cronbach alpha coefficient of .85. A total of 64 trainee teachers from the same cohort then answered the questionnaires. The study found a total of 60 (93.8%) people agreed that health education should be learned by trainee teachers and that the health education module be developed. Among other aspects, trainees hoped that cleanliness including managing of menstruation, healthy lifestyle, food and nutrition, health management as well as outdoor activities of students with learning disabilities will be included in the module. A total of 60 trainees also agreed that health education needs to be studied by students who face problems with personal hygiene: the physical body, food and nutrition, communication and relationship. Teachers and parents who are not equipped with health education were also identified as part of the problem. The development of the learning module is expected to address all the aspects so that the gap between teaching and practices in training special education teachers can be overcome in the future.

Keywords: needs analysis, health education, Student with Learning Disabilities, Trainee Teachers, Bachelor Of Teaching (Hons)(Special Education-Learning Disabilities For Primary Education)(Bac.TSE-LDPE), Teachers Training Institute(TTI), Integrated Special Education Programme(ISEP).

INTRODUCTION

Studies on improving trainee teacher competency are still being carried out until today by researchers across the world in order to provide the next generation of special education teachers with skills needed for teaching in the 21st century (Horrocks & Morgan, 2011; Kim & Vail, 2011; Suhrheinrich, 2011). Therefore, the process of preparing teachers to use a comprehensive, integrated and multiple approach and should be more seriously considered. As adults, trainee teachers should be experiencing a learning process that they are aware of or realize, systematic, on going and planned in order to strengthen the values, skills and knowledge that exist in themselves (Mohd Azhar Abdul Hamid, Paimah Atoma, Muhamed Fauzi Othman, & Mohd Nasir, 2004).

For special education teachers in learning disabilities, educating these special group of students poses a greater challenge. The education received by these trainee teachers of special education should be
capable of transforming the Integrated Special Education Programme (ISEP) in Malaysia to make it on par with that in developed countries. A quality of special education teacher must be formed through an extensive training program, to produce teachers with knowledge in the teaching of math and reading, who can apply the knowledge learned, and are capable of carrying out individual teaching in consideration of the children’s challenging behaviour, and be able to interact with students having learning disabilities (Leko, Brownell, Sindelar, & Murphy, 2012).

In an effort to develop teachers, Teachers Training Institute (TTI) is responsible for the training of prospective primary school teachers to teach students with learning disabilities including teachers for the Integrated Special Education Program (ISEP). From an institution that only produces graduates with diploma and certificate, now IPGM has obtained the mandate to confer a Bachelor of Teaching through the Bachelor of Teaching programme. This was made possible when the Cabinet approved upgrading of the 27 Colleges into Teachers Education Institutes on July 13, 2005. The first candidates of TTI have already graduated and received their bachelor’s degree in teaching in 2011. In 2012 TTI has already produced a total of 200 trained teachers holding a Bachelor of Teaching in Special Education, majoring in students with learning disabilities (Teachers Training Institute, 2013).

For trainee teachers majoring in learning disabilities, the institute offers a total of 15 major subjects commencing from semester 1 to 8. Of all the subjects found, Special Methods of T&L Science (PKB3110) and PKB3107-Basic Skills For Independent Living have elements of health education. In the subject of PKB 3107-topics of personal skills, personal safety, nutrition management, and hygiene practices are elements included in health education. The subject of the PKB 3110 title of functional science includes skills for learning science processes useful in everyday life, such as communication, self-care, socialization, use of public facilities, health, safety, recreation and career. Meanwhile, the elective package for this programme consists of Physical Education /English/Visual Arts Education (Official Portal of TTI- Campus of Special Education, 2013).

No health education subjects were found to be taught to students with learning disabilities in level 1 of the Standard Primary School Curriculum (KSSR)-Special Education. Health Education subjects were taught only in level 2 (Ministry of Education Curriculum Development, 2013) however it is quite different from the mainstream students. They have started to learn the subjects of health and physical education from year 1 to year 6.

Providing health education at an early age of schooling can provide the knowledge, develop attitude, build skills and promote healthy lifestyles among pupils in school. This requirement is no exception for the special education students with learning disabilities and further requires a bigger planning in advance and systematic reviews. Thus improving teacher quality towards the expected competency to take on the responsibility of educating students with learning disabilities is very critical. Knowledge is a prerequisite for the success of a teacher because teachers will not teach well about something not known to them.

**Problem Statement**

Health education is one of the dimensions in human functionality. A good physique, soul, and social life allows each person to live productive socially and economically is an indicator of good health (Kamus Dewan, 2012). Health care is one of the skills that need to be mastered in the domain of practical skills for students with learning disabilities, in addition to the activities of daily living such as personal care, workplace skills, using money, travel and transportation, schedule for daily activities and telephone communication skills (Gargiulo, 2012). Health education generally covers all the knowledge about the dimensions of health including physical, mental, spiritual, intellectual, social and environmental (Anspaugh & Ezell, 2007). It is therefore important for a teacher of children with learning disabilities to have the right knowledge and attitude to communicate and deliver or disseminate the right health practices to these students. Hence teachers assigned to teach health education to students with learning disabilities must receive adequate training (Tiwari, Rathor, & Singh, 2008).

Health and environment affect human functionality including all personal activities such as body structure and its functions, personal activities and their involvement (Shalock, Borthwick-Duffy, Bradley, Buntinx, Coulter, & Craig, 2013). Health education which has been made a compulsory subject in
mainstream education (Education Act 1996) cannot be marginalized among students with learning disabilities as its requirements are more critical.

Therefore, health education should be emphasized in educating students with learning disabilities. Prospective teachers need to be equipped with knowledge, skills and sufficient values in the current teacher training to carry out their responsibilities more effectively. The efficacy of teachers in teaching students with learning disabilities is significantly influenced by their experience, knowledge and formal training (Casebolte & Hodge, 2010). However until today, health education has not been offered in the training curriculum of the trainee teachers in Special Education-Learning Disabilities for Primary Education) programme in TTI as either a major, minor or elective subject. Two major subjects in this program, namely PKB3110 (Special Methods in T&L Science) and PKB 3107 (Basic Skills of Independent Living) are insufficient for prospective teachers to be competent in dealing with aspects of health education among students with learning disabilities across the curriculum of students with learning disabilities (Alijah Ujang, 2007).

Studies have been carried out on a total of 494 health education teachers (Howard-Barr, Rienzo, Pigg, & James, 2005), to view teacher preparation for teaching health education in Florida. The findings show these teachers felt teaching these subjects is important to students with learning disabilities and noted that the training they received is still inadequate. They also suggested the need for collaboration with mainstream health education teachers. Sexuality education as one of the components of a comprehensive health education in schools should also be taught during the teachers’ training to enable teachers to be competent and confident to teach in their school someday (Klein Breck, 2010). The need to train teachers in health education would also be in line with the transformation of the education curriculum in the Malaysian educational system. The alternative curriculum for students with learning disabilities in KBSR have been amplified in KSSR special education. This puts health education as the subject of Health and Physical Education for students in level 2 from 2011 (Ministry of Education Curriculum Development, 2013).

Therefore in order to ensure holistic development of pupils with learning disabilities occur within their education period, trainee teachers need to master the content of health education as a whole so that they have an accurate and clear understanding of the extensive coverage of health education elements and can further transfer knowledge and skills according to the right techniques and methods appropriate to enable students with learning disabilities to practice a healthy lifestyle. The development of the health education learning module is expected to help prospective teacher in teaching students with learning disabilities to be prepared with enough input to deliver, implement and be a role model in good health practices in school. This is in line with the philosophy of Special Education:

Special Education is a continuous effort to promote the optimal development of an individual as a skilled, having the right orientation, able, faithful, independent, able to plan and manage the lives and realize their own potential as an individual and a member of a society that is balanced and productive in accordance with National Education Philosophy. (Special Education Division, 2013).

The TTI staff members should welcome the TTI strategic plan in focusing on excellence in teaching and learning. The need for trainee teachers to have the right or exact knowledge, skills and values through a variety of learning tools can be modified to ensure that prospective teachers become the right teachers (Ministry of Education, 2013).

Health education subject in primary schools joined the mainstream from 2011; trainees were also supplied with the module for teachers’ physical health, emotional health and individual health to implement health education (Ministry of Education Curriculum Development, 2013). The Ministry of Health, a government agency having the same responsibility to this group has established a training module for the reproductive health of children and adolescents with disabilities through “Live Life Stay Safe” to address issues in Health Education (Family health development division, 2012). This means that the module to help teach and learn health education among these prospective teachers has yet to exist.

In this instance there is a need to develop the module to fill the gap in the teachers training in health education as a result of lower emphasis on the subjects in the Standard curriculum of primary school for Special Education and the teacher training curriculum for the Bachelor of Teaching (Hons)
Education-Learning Disabilities for Primary Education) programme in TTI. It is also hoped to strengthen these prospective teachers in implementing the aspects of health education across the curriculum for students with learning disabilities (Alijah Ujang, 2007).

Furthermore, in the context of realising human capital development in the Education Development Plan 2010-2025, a health education curriculum needs to be implemented effectively because the extensive scope of the Special Education curriculum will complete the students with a variety of skills in life such as the creative and critical thinking, foster endurance and the ability to solve problems rationally and practice of moral values during their lifetime. This directly will contribute to efforts at creating the next generation of students with learning disabilities who are able to achieve personal well-being and contribute to the harmony and prosperity of the community, the country and people of Malaysia (Ning, 2009). Therefore, the needs analysis study for developing a Learning Module on health education for trainee teachers of Bachelor of Teaching (Hons)(Special Education-Learning Disabilities for Primary Education) programme in TTI is timely.

Research Questions
The following research questions were proposed as the basis for this study:

1. Is health education important to be learned by students with learning disabilities in school?
2. What are the problems faced by trainee teachers in addressing students with learning disabilities in their health issues?
3. Is health education important to be learn in the Bachelor of Teaching (Hons)(Special Education-Learning Disabilities for Primary Education) programme in TTI?
4. Does development of learning health education module for trainee teachers in the Bachelor of teaching (Hons)(Special Education-Learning Disabilities for Primary Education) programme in TTI a necessity?
5. Why is the development of learning health education modules for trainee teachers in the Bachelor of Teaching (Hons)(Special Education-Learning Disabilities for Primary Education) programme in TTI needed?

METHODOLOGY

This study uses the survey method. Data were collected using questionaires specially created for this study.

Sampling
A total of 64 pre-service teachers participated in the study. They were students for the January 2010 intake in the Bachelor of teaching (Hons)(Special Education-Learning Disabilities for Primary Education) programme in IPG for their Bachelor’s degree. All participants had undergone three phases of professional practices in Integrated Special Education programme for students with learning disabilities in schools for six months. There were 34 (53.1%) females and 30 (46.9%) males with 56 (87.5%) of the participants around 20-23 years old. All participants were in their eighth semester of their study when they participated in this study.

Instrument
Data were collected through a questionnaire comprising two sections. Section A consists of a close-ended questions with five-point Likert scale. This section was analysed using frequency and percentage for getting the following information:

- Health education for learning disabilities in schools.
- Health education for trainee teachers in teachers training institution.
- Module of learning Health Education for trainee teachers.
Meanwhile section B of the questionnaire consists of open-ended questions and was analysed with thematic method in order to get the following information:

- Issues in health education in students with learning disabilities.
- Importance of health education learning modules development for trainee teachers in teacher training institution

The instrument was piloted to a total of 20 trainee teachers in the same cohort with the Cronbach alpha coefficient of .85. This value shows a strong reliability of the instrument.

**FINDINGS AND DISCUSSION**

Responses from the questionnaire administered revealed a rich pool of information and reflected a set of emerging themes to answer all the research questions.

**Students with Learning Disabilities: The Importance of Learning Health Education**

Participants’ responses to the importance of health education subjects to be taught to students with learning disabilities are reflected in the following Table 1.

**Students with Learning Disabilities: The Importance of Learning Health Education**

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<table>
<thead>
<tr>
<th>Table 1 The Importance of Learning Health Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>1 (strongly disagree)</td>
</tr>
<tr>
<td>2 (disagree)</td>
</tr>
<tr>
<td>3 (somewhat agree)</td>
</tr>
<tr>
<td>4 (agree)</td>
</tr>
<tr>
<td>5 (strongly agree)</td>
</tr>
</tbody>
</table>

Based on the results of Table 1, it is important for students with learning disabilities in school to learn about health education. A total of 60 participants (93.8%) agree/strongly agree that students with learning disabilities learn the subject of health education in school.

**Students With Learning Disabilities: Problems Encountered In Addressing Health Issues In School**

A total of 38 responses were received regarding the problems faced in addressing health issues of students with learning disabilities in school. The responses reflected a set of emerging themes as follows:

- hygiene: health and physical
- knowledge of teachers and parents
- food and nutrition
- safety
- relationships and interactions

**Hygiene: Health and Physical**
The Findings showed that more trainee teachers states that the aspects of hygiene that includes the body and physical as a problem for them to deal with in school. The problems included managing students and ensuring they wash their private parts, limbs, clothing as well as pads during menstruation. The participants mentioned on personal hygiene as follows:

- wash the genitals after menstruation (P17: 1)
- washing of private parts (P30: 1)
- method of washing the nose (P64: 1)
- wash eyes, nose, mouth and brush the teeth (P21: 1)
- clipping nails properly (P23: 1)
- personal hygiene management (P45: 1)

The participants also mentioned on physical hygiene as follows:

- toilet hygiene, wearing of pants before and after toilet (P36: 1)
- clean clothes (P24: 1)
- wash pad cleanliness (P25: 1)

Therefore, in future, aspects of cleanliness of students with learning disabilities can be considered and included in the health education learning modules.

**Lack of Knowledge Among Teachers And Parents**

Participants also mentioned about the lack of knowledge among teachers and parents in health education issues. Participant 2, 3, 6, 41, 42 and 58 expressed their concern as follows:

- lack of knowledge and collaboration among teachers and parents (P2: 1)
- teachers’ lack knowledge on health education for pupils with learning disabilities (P3: 1)
- ISEP pupils either do not or have less understanding on the importance health care while parents did not stress on the matter at home (P6: 2)
- trainee teachers did not have enough exposure (P41: 1)
- no specialization in health education (P42: 1)
- teachers lack practical knowledge while students lack response and forget easily (P58: 1)

Therefore the development of this learning module should be able to provide knowledge about health education to teachers and parents of students with learning disabilities.

**Food And Nutrition**

Researchers also found that the participants stated that they had problems in handling food and daily nutrition in health education. This was stated by P54 as follows: menstruation, sexuality, daily nutrition cleanliness (P54: 1)

Thus aspects of food and nutrition can be included in the health education learning modules in future researches.

**Safety Study**

Some 53 participants also said that security issues in students with learning disabilities were a problem to teachers in school. One trainee highlighted the safety of students with learning disabilities as a problem: worry will be an accident or injury to student with learning disabilities (P53: 1)
Thus the safety aspect can also be taken into account in developing the learning module on health education for trainee teachers.

**Relationships and Interactions**

This study also found that one participant expressed this aspect as a problem to the students with learning disabilities in school. The subject P13 mentioned on relationships and interactions are as follows: *personal care and limit interaction (P13: 1)*

Thus the aspect of relationships can be taken into account in developing the learning module on health education for trainee teachers in the TTI.

*Trainee Teachers: The Importance Of Learning Health Education*

The importance of health education in teachers training institute shown in Table 2.

**Table 2 The Importance of Learning Health Education**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>1 (strongly disagree)</th>
<th>2 (disagree)</th>
<th>3 (somewhat agree)</th>
<th>4 (agree)</th>
<th>5 (strongly agree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The importance of Health Education for trainee teachers</td>
<td>0%</td>
<td>1.6%</td>
<td>4.7%</td>
<td>46.9%</td>
<td>46.9%</td>
</tr>
</tbody>
</table>

Based on the findings of Table 2, a total of 60 persons (93.8%) of participants, agree or strongly agree that health education is something that is needed to be learned while in the teachers training institute.

The data on perceived need for health education learning module are shown in Table 3.

**Table 3 Health Education Learning Module Development For Trainee Teachers in (Bac.TSE-LDPE) Programme in TTI**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>1 (strongly disagree)</th>
<th>2 (disagree)</th>
<th>3 (somewhat agree)</th>
<th>4 (agree)</th>
<th>5 (strongly agree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of learning health education module</td>
<td>0%</td>
<td>1.6%</td>
<td>4.7%</td>
<td>53.1%</td>
<td>40.6%</td>
</tr>
</tbody>
</table>

The responses displayed in Table 3 show a total of 60 (93.7%) participants agree/strongly agree that the health education learning module be developed. The same percentage of 93.8% agree to learn about health education in TTI.

Findings of the open-ended questions about the importance of learning modules in health education for trainee teachers have been analyzed. These findings allow researchers to get an overview about the contents of health education that can be taken into consideration during the process of designing and developing this module in future. For this particular question, only 40 of them responded. The importance of the health education learning module development, can be described by the following themes:

- Hygiene: hygiene, menstrual management
- Healthy lifestyle: fit and healthy
- Food and nutrition
- Health care
Hygiene: Hygiene, Menstrual Hygiene Management

This aspect was more often stated as the reason for developing this health education learning module. Participants agreed that health education learning module was developed because, according to P1:

to ... gain skills when faced with student experiencing menstruation, hygiene and so on. (P1: 3)

P1 also expressed the importance of health education learning modules among trainee teachers which are:

Provide opportunities for trainee teachers to manage special education students on cleanliness (P1: 1)

Hygienic aspect was raised by P8 as a necessary aspect for trainee teachers to empower the students with learning disabilities to manage themselves independently one day. P8 gives the following reasons:

...the basis of life for students with learning disabilities, education of hygiene can help them stand on their feet or manage themselves without the help of other people (P8: 1)

Accordingly, P9 states that this health education learning module could develop the awareness of teachers in school. P9 states as follows:

Educating students about the importance of the educational aspects of the students’ cleanliness (P9: 1)

Healthy Lifestyle

Healthy lifestyle for students with learning disabilities could be cultivated. P3 states that:

to expose in more detail and depth about health education to trainee teachers into the practice in T&L, next, educating students with learning disabilities to live a life with more secure and healthy (sic) (P3: 4)

P29 also states that the teachers could apply their knowledge to the student that would be able to improve their health. He argued as follows:

learning about health education need to be applied to the student with learning disabilities because students will be more fit and healthy (P29: 2)

Next P4, focusing on food and nutrition which are components in developing a healthy lifestyle. P4 states as follows:

Health care is very important to the students of special education. Therefore, the trainee teachers need one benchmark to this subject so that trainee teachers have a high level of health knowledge. In addition, some of the trainee teachers have low health awareness because often give the token in the form of food with high sugar content. May health education learning modules focuses on the effect of biology students in terms of digestion and the effect that will happen when some food materials given to students with learning disabilities (P4: 5)

Health care aspects that may be included in developing the module can be a reference to trainee teachers in planning health care activities for students with learning disabilities in ISEP at school. As reference on health care P6 states that: Teachers and trainee teachers easily get references about students health care especially for special education students (P6: 1)

P7 stressed on the knowledge of health care as follows:

Special education students often cannot afford to take good care of themselves and limit their interactions. But, teachers also do not have the skills. This situation will cause problems later on (P7: 2)

Knowing the health problems of students with learning disabilities as well as their management, is...
also important in the current study. P31 and P40 state: **trainee teachers need to recognize health problems and how to handle learning disabilities students in health management (P31: 1)**

P40 claimed on health problems of students with learning disabilities. He states: **to help teachers find out the health problem of pupils learning disabilities (P40: 1)**

Teachers who have knowledge about the health problems have a better understanding about the health of students with learning disabilities. This was stated by P31 as follows:

**it helped trainee teachers gain greater and better understanding of health problems faced by students in special education through internal and external health activities they do. Trainee teachers are able to apply and help students to have better understanding of the special student and health-conscious (P31: 3)**

Thus they can help students with learning disabilities as told by of P17: **help special education students manage themselves (P17: 1)**

To summarise all the trainee teachers’ views, many aspects of health education need to be addressed when developing the health education learning module for trainee teachers. The aspects are hygiene, healthy lifestyle, food and nutrition, health care and outdoor activities.

**SUMMARY**

This study is committed to ensuring the development of a Health Education module for trainee teachers in teacher education institutions in order to produce quality teachers who are competent in educating students with learning disabilities in school. The importance of learning Health Education for students with learning disabilities in school is as important as learning Health Education for trainee teachers in the teacher training institute. All aspects of handling students with learning disabilities in school, such as hygiene, healthy lifestyle, food and nutrition, safety and relationships recommended in this study should be considered in developing the learning Health Education module for trainee teachers in Bachelor of Teaching (Hons) (Special Education-Learning Disabilities for Primary Education) programme in the teacher training institute. The development of the learning module is expected to address all the aspects so that the gap between teaching and practices in training special education teachers can be bridged in the future.

**REFERENCES**


