

Thinking Maps in Moral Education

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Abstract

Since the launch of the Blue Print for Education in Malaysia (2013-2025), various transformation strategies have been introduced in the Ministry of Education in Malaysia. Some programmes are local such as upgrading the teaching profession, encouraging the crème of the crème of the younger generation to pursue the teaching profession and others. At a more international level, various teaching methodologies have been imported and introduced to encourage higher order thinking skills (HOTS) among teachers to be taught to students in primary and secondary schools. One of the technique introduced stage by stage and finally nationwide on 1 April 2014 was using i-THINK maps in teaching and learning. This article describes the history of introducing i-THINK maps in the education system in Malaysia, especially in Moral Education, the issues involved and the way forward.

Keywords: thinking maps, higher order thinking skills, Moral Education

Introduction

Moral Education has been in the Malaysian education system as a core subject since 1983, as needs of education change, the subject which is under the social science and humanities category also underwent and is still undergoing various transformations. Such changes are necessary to ensure that current day Moral Education subject caters to the needs of the current students and society as a whole. The philosophy of Moral Education which aims to develop students into individuals who have equal balance in moral thinking, moral emotions

and moral action is always the basics of Moral Education subject in Malaysia (Moral Education Syllabus, 2010).

As one of the aspects of Moral Education is moral thinking which is to develop the cognition of the individual to be able to make decision and think rationally, various strategies have been used by Moral Education teachers to develop that aspect of morality. In earlier times when Moral Education was introduced in the Malaysian education curriculum, 16 core values were introduced as the fundamentals of Moral Education and teachers taught those values in a very preaching, indoctrination way. Those group of teachers did not have the proper training to teach Moral Education and some went to the extent of teaching Moral Education as if it was Religious Studies. Over the years, more lecturers and teachers have been exposed to teach Moral Education as it is, with focus on moral thinking, moral feeling and moral action.

In the late 1990s, the thinking maps using Theory of Constrains (TOC) was introduced in Malaysian schools. Students were resolving moral dilemmas using some graphics introduced in TOC. However, these thinking maps died a natural death in the system as such maps were not introduced in syllabus of teacher training and newer teachers who came into the system did not even know what TOC was. Now i-THINK has been introduced nationwide and several teachers training institutes have been appointed to prepare modules for teacher trainers nationwide. They are also responsible for providing in-house-training for other teacher trainers.

History of i-THINK in Malaysia

I-THINK Maps are graphics in the form of mind maps to help individuals structure their thoughts to understand a certain topic, follow a certain story, and resolve a certain issue etc. I-THINK maps are easy to draw and simple to use. That was the idea that David Hyerle had when he introduced i-THINK maps to support cognition and critical thinking among students in school. Later Richard Cummins through his organisation, Thinking School International (TSI) worked closely with the Malaysian Ministry of Education, to help develop thinking skill in all Malaysian schools.

The Ministry of Education in Malaysia and Agensi Inovasi Malaysia (AIM) worked together to create i-THINK project to help Malaysian students to think critically and be prepared for the future. The objectives of i-THINK project in Malaysia include: nurture and develop innovative human capital, increase thinking skills amongst children and equip future generations with HOTS.

The whole project was divided into three phases. Phase one was when Richard Cummins and his team from TSI trained teachers in 10 pilot schools and 400 personnels within the Ministry of Education. Phase two is when 1000 schools were trained by local trainers and phase three is when the Prime Minister launched the on-line i-THINK programme for 9000 schools nationwide on 1st April 2014. However, there is still lack of information on how i-THINK maps can be integrated in the different subjects in the Malaysian context.

I-THINK Maps and Moral Education

I-THINK maps are a set of tools which enables teachers to transfer the curriculum into a more meaningful way of teaching. It consist of eight visual maps based on basic fundamental thinking. According to Paivio (1990), 90 percent of information that reaches one's brain is in visual form. Thus i-THINK maps activates thinking the natural way and attracts students' attention. In Moral Education, learning about values and virtues in order to be moral is not sufficient in the current complex and challenging world. There is the need to understand situations in multiple environments and resolve moral dilemmas in different context. One needs to understand the real world around him or her and apply skills, knowledge and wisdom when interacting with issues within the real world. It may be through linguistic and non-linguistic ways.

Research has proven that knowledge is stored in the brains in linguistic and non-linguistics way (Haystead and Marzano, 2009). Research also showed that the more both ways are applied, the higher is the level of understand and knowledge absorption of an individual. David Hyerle, after years of teaching and researching came up with i-THINK maps which he concluded as common visual language for thinking. I-THINK maps consist of eight sets of visual tools. They are:

Circle Map

Bubble Map

Double Bubble Map

Tree Map

Brace Map

Flow Map

Multi Flow Map

Bridge Map

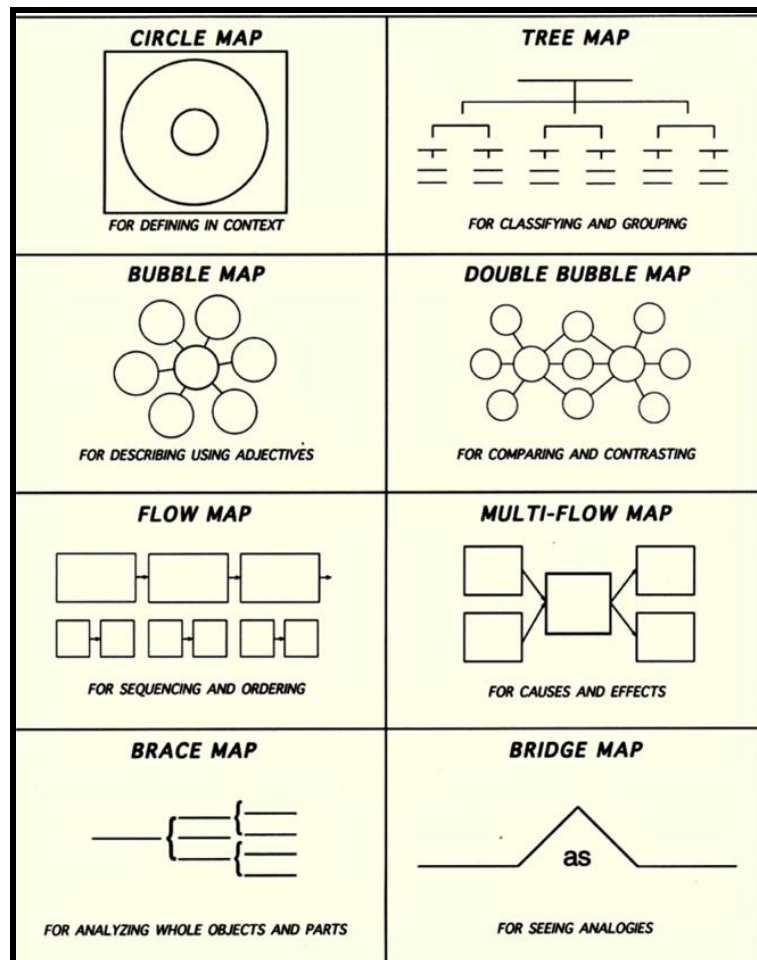


Figure 1: The eight maps in i-THINK

Each set of visual is different and has its own function. Where teaching Moral Education is concerned, not all the maps can be applied or used all the time. Some can be used to start off a discussion, some maps can be used to consolidate a lesson and others during presentation of group discussion.

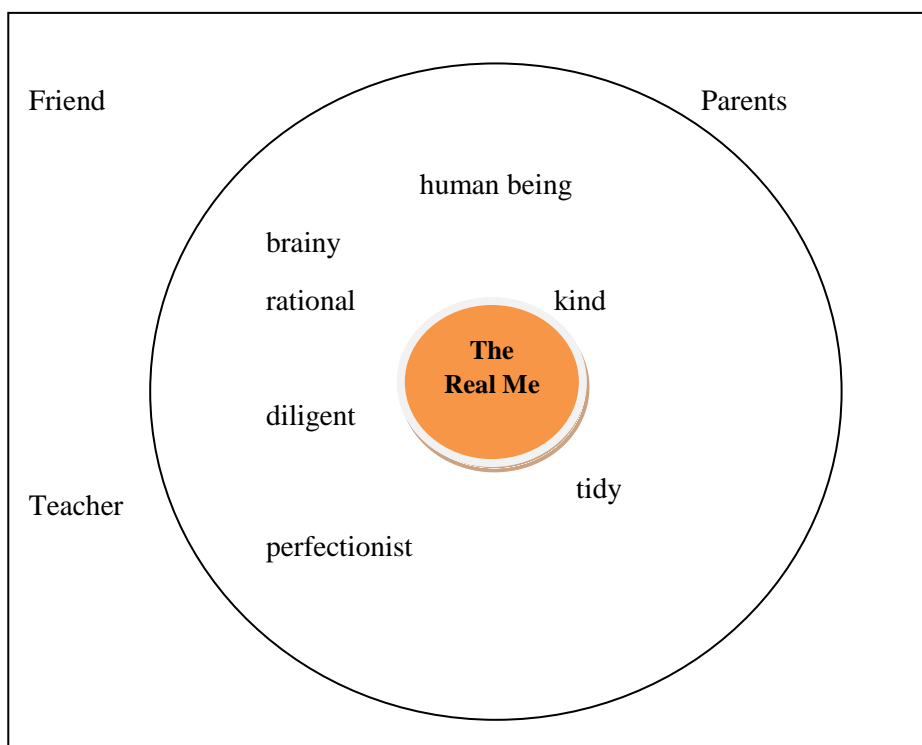
Circle Map

The Circle Map can be used to define or understand a certain topic through brainstorming. The Circle Map can be used to generate ideas, evaluate what is already known or identified or already learnt. The Circle Map consists of two circles, one big circle, and one small circle inside a square. The inner circle is where students write the topic to be discussed. The outer circle explains the inner circle. The square has the sources where students obtain the answer for the second circle.

In Moral Education, the Circle Map can be used to understand a certain value, understand where the value is learnt and who or what is the source of that value. Circle Maps can be used in the beginning as a brainstorming tool or at the end of the lesson as a consolidation tool. However, teacher and students with their own creativity can use it in other stages of the Moral Education lesson too.

Example of a Circle Map used in Moral Education:

Figure 2: Circle Map of “The Real Me”

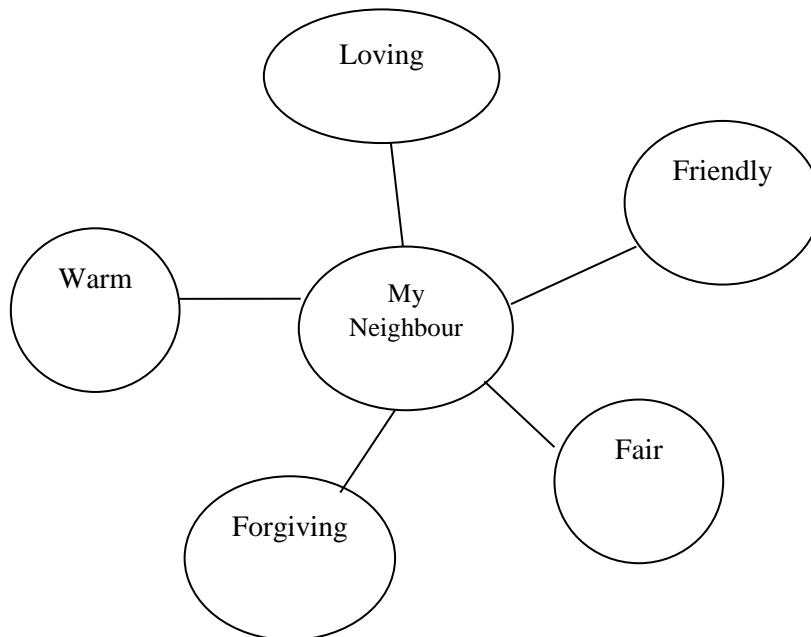


Bubble Map

The Bubble Map is usually used to explain an object or a character using adjectival words or phrases. The Bubble Map consists of several circles which are connected by lines. The centre circle is where the subject is written and all the other circles which are linked explain that subject using appropriate adjectival words or phrases. Those words come in handy when students write something in detail or analyse the subject analytically.

Example of a Bubble Map used in Moral Education:

Figure 3: Bubble Map “My Neighbour”



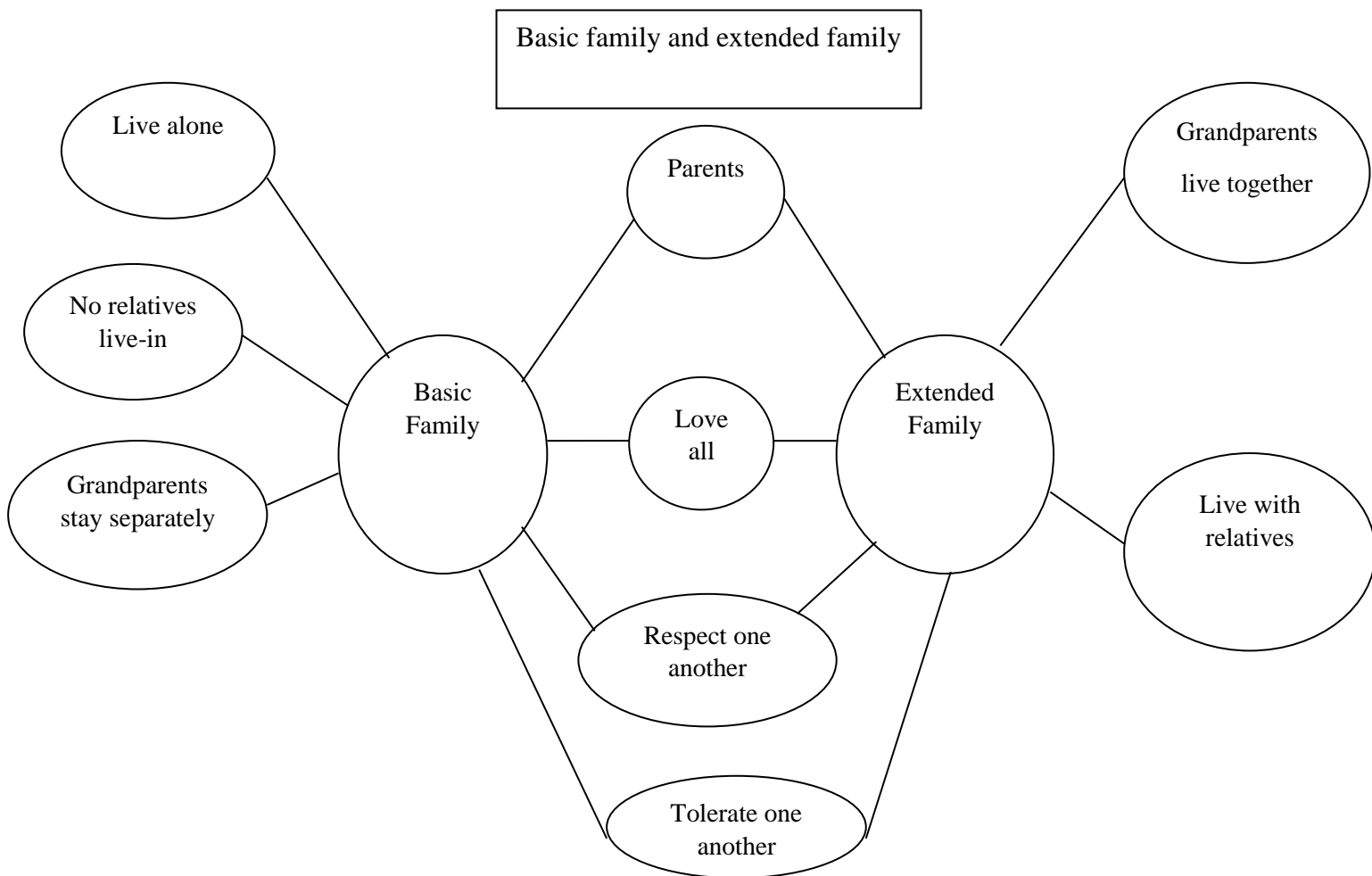
Double Bubble Map

The Double Bubble Map is a thinking tool used to compare and contrast ideas. The concept is similar with the Venn diagram. Two items or issues which are compared is written in the two circles in the centre. The circles on the outside shows the difference between the two. The circles in the centre that connects both the two circles show the similarities of the two items or issues.

The Double Bubble Map helps students compare and contrast subjects and ideas in simple graphic form. For users who are beginners, colour codes can be used to make the thinking tool simple to understand.

Example of a Double Bubble Map used in Moral Education:

Figure 4: Double Bubble Map: “Basic Family and Extended Family”

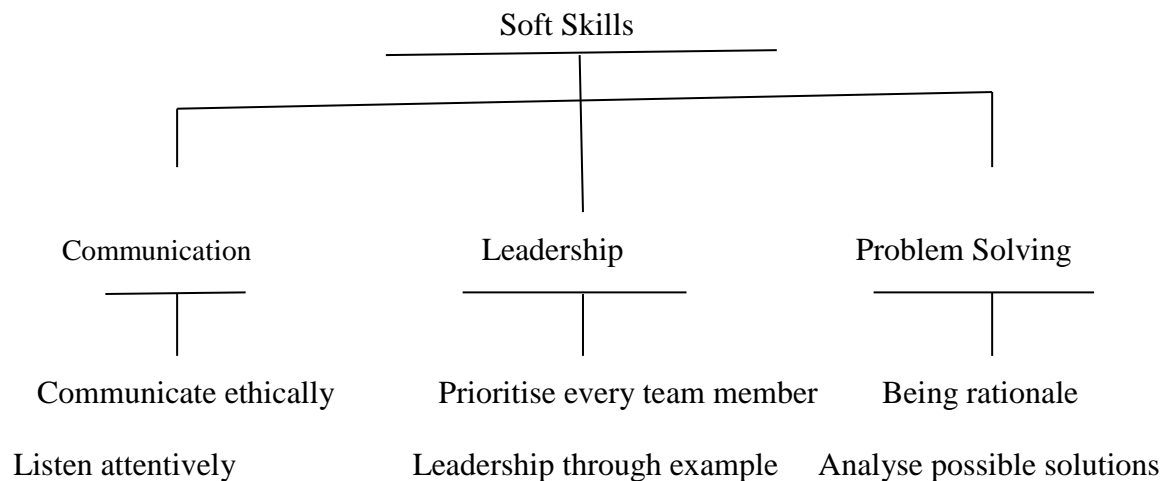


Tree Map

The Tree Map is a graphic organiser to classify and group information or matters discussed in class. It shows the hierarchy of a topic with the small sections. The Tree Map is used to organise or arrange information to study a topic, cultivate the mind and discuss an idea as well as organise a written assignment. The Tree Map can be used to classify, accumulate or segregate a certain topic or category.

Example of a Tree Map used in Moral Education:

Figure 5: Tree Map about “Soft Skills”

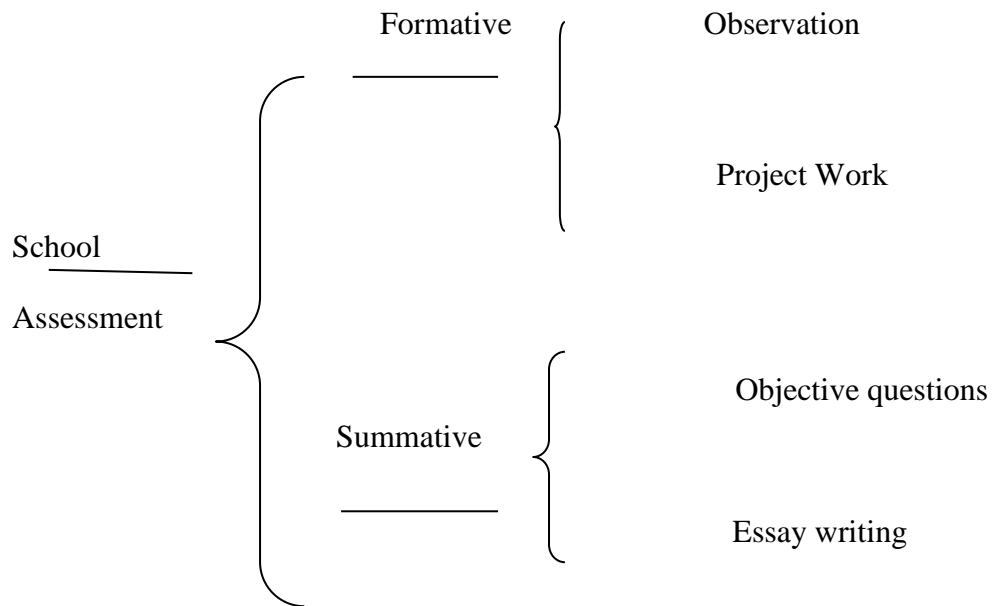


Brace Map

The Brace Map is a graphic organiser used to analyse whole objects and parts. Brace Maps helps students to see an object or a situation as a whole and the parts involved within it. In a Moral Education class, teacher can use Brace Map to help in discussions of serious issues such as bullying, healthy lifestyle etc. What seems complicated and difficult to understand becomes straightforward and easy to follow.

Example of a Brace Map used in Moral Education:

Figure 6: Brace Map about School Based Assessment

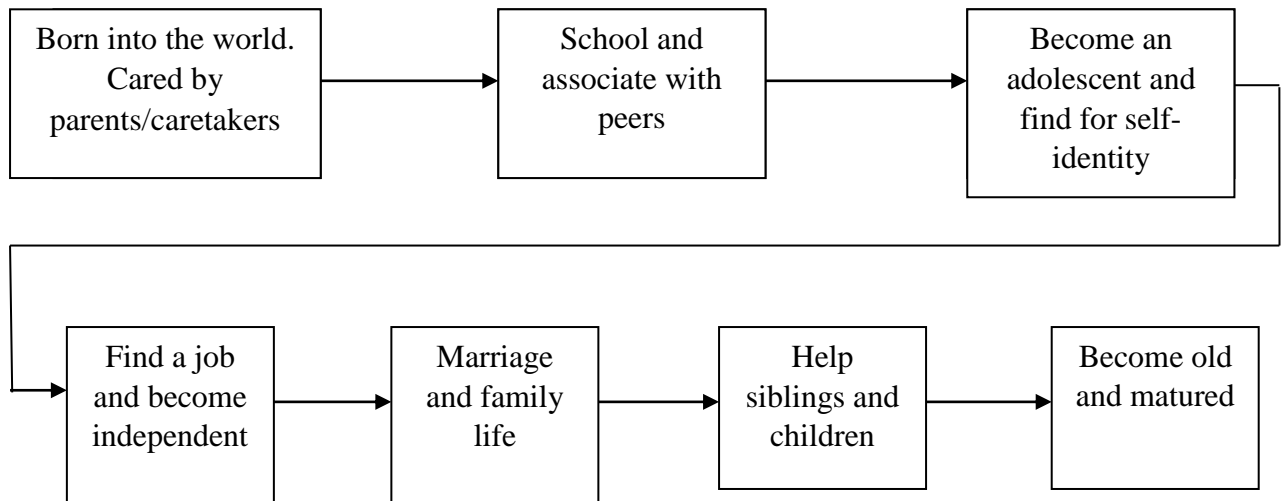


Flow Map

Flow Maps are used to help thinking in the form of sequencing plots, processes or chronologies. The purpose of using Flow Maps is to observe a certain process in a systematic order. The Flow Map can lead to anywhere as long as the flow of the story is in structured systematically. The Flow Map is suitable for students of any ages because the higher the age, the chronological arrangement can get more complex and complicated.

Example of a Flow Map used in Moral Education:

Figure 7: Flow Map about “Human Life”



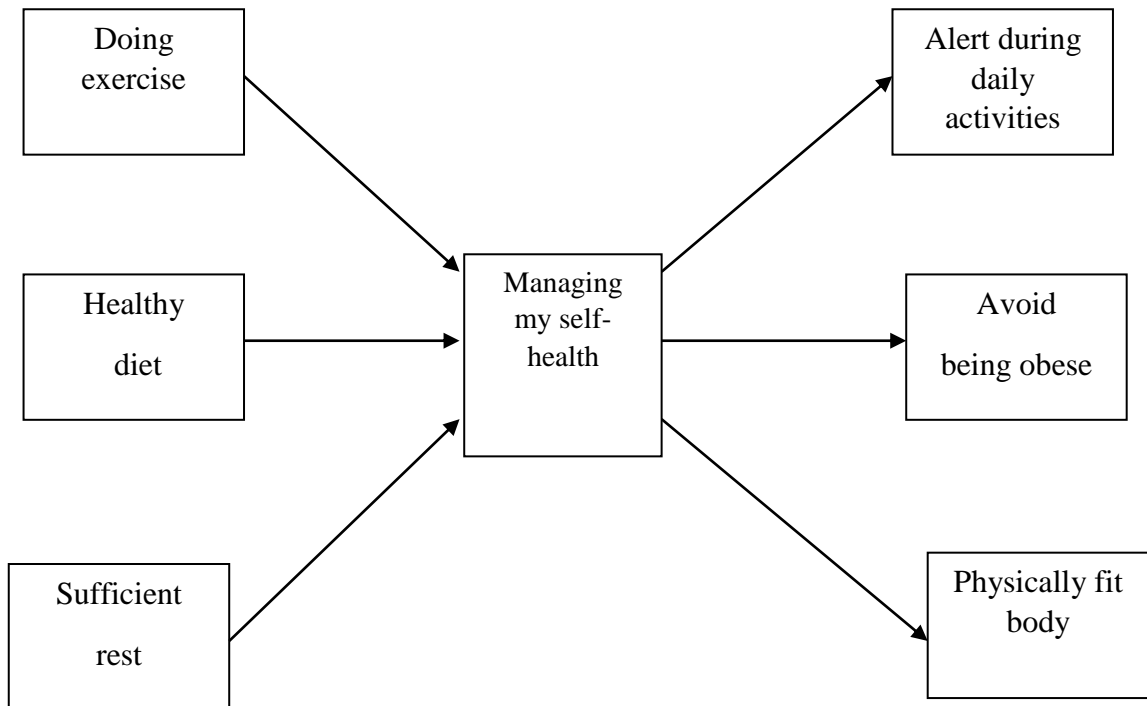
Multi Flow Map

The Multi Flow Map is a thinking tool to understand cause and effect. The graphic arrangement in the Multi Flow Map helps students in analysing the cause and effect in a certain situation, imagine a certain project and understand the effects of a certain action which has been taken or will be taken. The visuals in the Multi Flow Map helps students provide rational reasoning and increases the estimation skills in themselves.

In Moral Education, this skill is essential because every day students have to decide on what decisions to make when they are faced with moral dilemmas. They have to think about the choices they have and the effects of making a certain choice.

Example of a Multi Flow Map used in Moral Education:

Figure 8: Multi Flow Map about “Self Health”



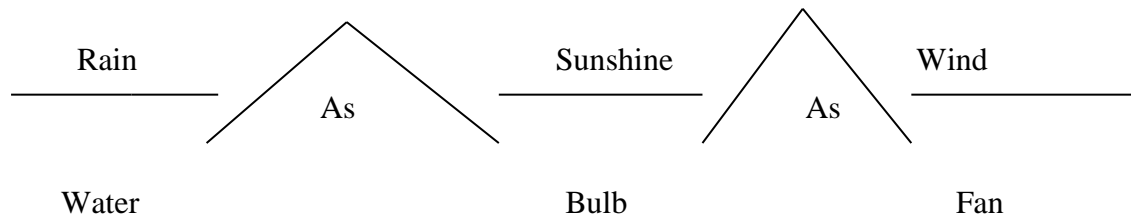
Bridge Map

The Bridge Map is used to increase thinking based on seeing analogies in a systematic way. The Bridge map helps students see visual analogies like A is for B and as B is for C. It is bridged with a bridge into the thinking tool with two analogies in a top and bottom position as in a bridge structure. It gives the visual the students need to start thinking from concrete to abstract as students' knowledge increase.

The Bridge Map is useful in Moral Education because when learning virtues which are abstract, students would need to analyse what those virtues are similar to in an analogy.

Example of a Bridge Map used in Moral Education:

Figure 9: Bridge Map about “Nature”



Issues in using i-THINK Maps in Moral Education

Now that it is quite evident that i-THINK maps can be integrated into the teaching of Moral Education in the classroom, the next issue is who or which body is going to help teachers of Moral Education understand the maps well enough to utilise them in any stages of their lessons.

It is obvious that the three phases of implementing the use of i-THINK maps in Malaysia does not provide enough support for every teacher to be efficiently using the different visuals in their classroom. This lack of support might be the repetition of another natural death of the usage of i-THINK maps; just as what happened to the use of TOC thinking tools in Malaysian schools in late 1990s. There should be some mechanism to ensure that these thinking tools are consistently reminded about because when it comes to financial implications, big amount of financial portion has been invested into paying the consultants, training the local personals, sending local personals overseas for training and observing other nations using i-THINK and so forth.

Way Forward

What should be done to ensure that i-THINK project does not die a natural death like many other projects implemented in the Malaysian education system. This can be analysed based on several categories; the introducers, the administrators, the trained personals, the pilot study schools involved, the whole group of teachers in Malaysia, media and society on its whole.

Since the Ministry of Education (MOE) in Malaysia and Agensi Inovasi Malaysia (AIM) initiated the whole i-THINK project, they have a serious responsibility to ensure that money spent on the project is worth the while. The leaders of MOE and AIM should be responsible to “shout” and create awareness of i-THINK project whenever they have the opportunity to do so.

Next are the personals involved in the first phase of i-THINK project. Much financial support was given to the principals of the ten schools chosen to go overseas and observe how i-THINK is implemented in other countries. These personals have the great responsibility to provide courses and publish what they have learnt to ensure that knowledge learnt does not just stay with them but is passed on to others as well. They were the “chosen ones” and they got to play their role as pioneers of i-THINK project in Malaysia.

The pilot study schools got to be evolved into “role model schools” for i-THINK project. They should work with MOE and AIM to organise exhibitions, talks, seminars, workshops and symposiums to promote i-THINK in other schools. The momentum should be fast and teachers and other schools must be motivated to use i-THINK tools in their teaching and learning.

From my own observation as an educator and now a researcher, I find that Malaysia has lots of potential and we are open to many innovative ideas. We take the trouble to invite

consultants, hire professionals from abroad to train our local educators in latest technology, methods of teaching and assessment just to name a few. However, the momentum slows down and there is hardly any follow up after a decade or two. One good example is the use of TOC in teaching and learning. Now it has become absolute except for some of us who still include them in textbooks that we write. In such matters, we have to ensure that any project that is started stays on and if it is side lined then there should be comprehensive research and report as why the project failed or is side lined.

I-THINK has potential to ensure that the students will have HOTS after several years of using the visual thinking tools. To ensure that the objective of i-THINK project becomes a reality, every single individual in MOE has a role to play and society which includes the media, parents and NGOs must also take an active role in ensuring that what MOE and AIM undertook is sustained for the growth and development of our nation.

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