ATTACHMENT 3

Theoretical concepts, Practise and Implementation

In classroom teaching the contents can be arranged following the ideas suggested by Quisumbing (2001). According to Quisumbing (2001, n.d.), there are three levels of teaching for the affective domain: the facts level, the concepts level and the valuing level. At the *facts level*, the teacher presents information. This level does not require students to connect with their higher levels of thinking. The next level is the *concepts level* where teachers teach the ideas and principles and guide students

...to assimilate facts and classify them and relate these to theories, principles, and laws. If the knowledge acquired is understood and applied, skills are developed. While the concepts level involves the use of cognitive abilities, it does not guarantee the ability to solve problems and make choices. (Clarke & Agne, 2007, p. 31)

The third level is the valuing level:

This entails the student's thinking, feeling and acting processes as she/he finds the connection of what she/he has learned from the facts and concepts level to her/his personal life and experiences. It helps the students crystallize concepts learned and relate them to her/his personal life and experience. There is a personal meaning experienced from the subject area. (Quisumbing, 2007, p. 31)

According to the SEAMEO resource package, the values-based lesson must include both the

...concept to be developed in the lesson and what the students need to infer from the discussion...the values to be communicated should be anchored to the points for discussion and the views elicited from the students for the values integration to be purposeful. (UNHABITAT & SEAMEO, 2007, p. 30).

As teachers teach subjects through EHV they bring out latent values from the content of the subject and from the students themselves (Jumsai, 2003; Seetharam & Seetharam, 2005). Students are guided and facilitated to discover their relationship with the environment around them and with the issues pertaining to their school subjects (Jumsai, 2003). Students are not

taught but questioned through introspection, discussion and reflection on the issues around them and how they can value the environment (Jumsai, 2003).

Role Modelling

Role modelling is an important principle. Teachers serve as role models by providing the required knowledge, attitudes, skills and resources in water education. Teachers have to engage students through constructive approaches by leading the learner through reflective practices (Jumsai, 2003). In addition the teachers must practise awareness of environmental issues by developing the right attitudes. As students practise and gain awareness they themselves become role models for the younger students. According to Jumsai (2003) teachers have to speak from their heart, and believe in what they say. Jumsai (2003) found that 27% of participants in his study reported that the teacher's influence was the most effective factor for creating change in students.

Teachers should learn to speak from their heart and touch the hearts of the students. To speak from the heart, the teacher must practice what she/he is teaching. Thus, it is necessary to speak from experience rather than repeating what is written in the textbooks. (Jumsai, 2003, p. 221)

Selected Teaching Processes: Teaching Pedagogies

The teaching pedagogies used for HVWSHE are silent sitting, prayers, storytelling and music. These enable character development in the students and sustainability of the values they hold.

Silent sitting

While group activities and reinforcing good habits through positive quotations are similar to other teaching methodologies, there are two techniques, which are characteristic of HVWSHE. One is silent sitting, which is compulsory for learners and is a major component of HVWSHE. It helps students' understanding and increases their awareness of the environment around them. Jumsai (2003) and Taplin et al. (2005) have reported that the exercise of silent sitting or silent

reflection has helped to calm the mind and enabled students to concentrate better. The use of silent sitting and visualisations help students to focus (Jumsai, 2003).

An example of silent sitting activity: This technique is used to enable students to concentrate and remove the problems or distraction they bring to their minds. An example of the activity is provided below:

Starting the Class – Silent sitting

Human Values Integrated Instructional Model focuses on calming the mind.

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It is used in water education as well. There is a sequence to follow either through light meditation, which is explained later in this section or through silent visualisation techniques. Teachers can use music depending on what works for students or listen to the teachers' calm voice that lead them step by step such as a walk through nature and experience their inner calmness for few moments before classes start.

During light meditation students are asked to sit erect and relaxed. They have to close their eyes and concentrate on their breath. They have to be aware of their breath and students learn to focus their minds through this breathing exercise. After one or two minutes as Jumsai (1997) suggested, teachers have to lead the silent sitting. With a soft and gentle voice teachers continue with the following sequence:

The Light Meditation

Imagine a light in front of us. Let us bring that light to our forehead. Let our head be filled with light. Whenever there is a light there can be no darkness. Our mind is filled with good thoughts. Our thoughts are filled with love and compassion. Now bring the light to our heart. Imagine there a lotus flower. When the light reaches the lotus, it starts to open up and it becomes a beautiful flower. Our heart becomes pure and filled with love and compassion. Now bring the light down to our arms and to our hands. Both our hands are filled with light. With these hands, we will do good actions and serve everyone with love and compassion. Now, bring the light down to our legs and feet. Let both our feet be filled with light. Let these feet take us to good places, to meet good people. Now, bring the light up through the body to our mouth. Let our mouth and tongue be filled with light. We speak the truth. We speak what is good and useful. Our words are full of love and compassion. Now bring the light to our ears. Both our ears are filled with light. We hear good things. We listen to good things. We listen to everyone with love and compassion. Now bring the light to our eyes. Both our eyes are filled with light. We look at everyone with love and compassion. We see good in everyone and in all things. Now take the light back up to our head. Let our head be filled with light. We are filled with love and wisdom. Now let the light increase in intensity. It is becoming brighter and brighter. The light is now expanding outwards until it covers our parents, our teachers, relatives and friends. The light continues to expand until it covers all the peoples of the world as well as animals and all of nature. Let the world be filled with light and Love. Let the world be filled with peace. Continue to expand this light to every corner of the universe. Everywhere there is light (Jumsai, 1997. pp.84-88).

Prayer

Prayer is not one of the components of HVIIM. It is however used as a direct method as recommended in the *Facilitators and Trainer's Guidebook* (UNHABITAT, 2006). Prayer is used in schools with Education in Human Values to help students learn the values of gratitude and respect. It is also a sign of collective unity among members of the school. Prayer helps students to transform their minds. In conducting prayers, the values of gratitude and respect are held in shared moments among learners. According to Jumsai, where prayers are not used in classrooms, "quotations, positive affirmations, poems or some elevating and positive thoughts of the day can be used" (Jumsai, 2003, p. 178). Prayers and silent sitting were identified as the second most effective factor after good teachers for promoting positive changes in both attitudes and behaviours in students (Jumsai, 2003).

An example of Prayers that is used in classrooms in Thailand is as follows:

Peace, peace, peace

Peace on earth Peace for all the universe Peace for all the universe Peace for all the universe (Jumsai, Sathya Sai School, Thailand)

Storytelling

Stories stimulate students' thinking through values clarification and discussion will help students develop a capacity to discriminate. Concepts such as sustainability, preservation and environmental change can be explained through stories, discussions, role-plays, exhibitions and the like. Stories with good morals and examples of wisdom from the past can help to make teaching interesting for the students (Jumsai, 2003; UNHABITAT & SEAMEO, 2007).

Storytelling about environmental disasters and human history informs students of past and present contexts and provides them with a connected feeling to time and history. Teachers integrate or elicit human values by relating real life stories on dignity and sanitation from various parts of the world where there is very little access to water. In HVWSHE students are encouraged to understand history, past events and the wisdom that is embedded in cultures, traditions and spiritual practices related to water education from all societies. Older students need reliable information on water use and conservation, while younger students require stories that help develop their imagination and love as well as an admiration for nature through poetry and field walks.

Story telling can combine a mathematical problem. One of the best moments for HVWSHE classes is using a story to bring out the inherent values that are present in the story itself.

Here is an excerpt of a mathematics teaching session using the Human Values Integrated Concept and integrated water education. This is reproduced with permission from Jumsai (2003):

A few years ago, some visitors were observing a class in mathematics in the first grade at a School. The class teacher was using a standard textbook in mathematics from which he was reading problems.

The observers read the problem in the book, which said that during the drought, a man went to the village well. With difficulty he was

able to get 10 buckets of water and the well went dry. He was so tired after getting the water that he fell asleep. When he woke up, he discovered that buckets of water had been stolen. How many buckets did the man have left? This problem if read out to the children as is could be very harmful to the students. The reason is that stealing

was mentioned as though it is a normal thing to do. There was no mention that we should not steal and that it would cause harm to others. If this were allowed to be stored in the subconscious then it would be used for future interpretation. A child may see something and the thought of stealing the object may come out from the subconscious that will make the child become a thief. Now, the class teacher started to read out the problem. He said: "During the drought, a man went to the village well. With difficulty he was able to get 10 buckets of water and the well went dry. He was so tired after getting the water that he fell asleep. When he woke up..." The teacher stopped to think and then he continued to say: "he saw, 7 ladies with one bucket each trying to get some water but the well was completely dry. Out of compassion, he gave water from 7 of his buckets to the ladies. The ladies were very happy. How many buckets with water did the man have left to take home?" The mathematical problem was the same, i.e. 10-7=? But the teacher had changed the wording in which values are integrated automatically into the problem and got rid of the negative value that existed before. The observers to the class were all very relieved and happy with the teacher (Jumsai, n.d, p.41-42).

Music

In HVWSHE, students are encouraged to compose their own value songs and make their own musical instruments. Music is integrated in lessons so that students are able to understand and consciously learn the values of water through joyful learning. Music is an important teaching pedagogy in classrooms for water education. Singing a value song is most often included in the morning assembly. Group singing and music are an integral part of the school curriculum. The integration is to help strengthen children's educational, physical and emotional development.

An example of a song used for teaching water education is provided below.

Lyrics of song "WATER: Precious water" with composed musical notes in the form of music or audio files (http://www.srecsam.edu.my/elearn/ (Appendix II).

- (Verse 1) Water can be Available from The Everyday's Rain, Everyday's Rain, Everyday's Rain, Water can be Available from The Everyday's Rain, We can reuse clean water.
- (Verse 2) Water will flow Away Through Every River, Every River, Every River, Water will flow Away Through Every River, We should not pollute water.
- (Verse 3) Water will be Abundant if we Try Entice Recycling, Encourage Reusing, Ensure/Enforce Reducing, Water will be Abundant if we Try Entice Recycling, We must conserve water.
- (Verse 4) Water forms A major part with Three quarters of Earth's Ratio,

Three quarters of Earth's Ratio, Three quarters of Earth's Ratio But only one percent is fresh to be shared by all living things, So WATER is very precious. (Ng, Teoh & Tan, 2007, p.31).

Teachers can also provide students with opportunities for singing, poetry writing and group composition relating to the environment. For more information see: (http://www.seameo.org/_HVWSHE-Toolkit/img/lp_cambodia.html).