# A LITERARY WORK FOR THE STUDY OF HIGH SCHOOL TEACHERS' PERCEPTION AND PRACTICES OF ENVIRONMENTAL EDUCATION INTEGRATION IN VIETNAM

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# 1. Overview of Environmental Education and Environmental Education research in Vietnam

The development of environmental studies in Vietnam began in the late 1980s paralleling with the government's enactment of "open door" policies. During the 1980s and early 1990s, this development included the elaboration of curricula, textbook development, trial teaching and teacher training (UNDP, 1999). According to UNDP (1999), Ministry of Education and Training (MOET) officially approved and issued the curriculum for primary education, including a presentation of environmental issues in subjects entitled Nature and Society, Health Education and Moral Education. As stated in UNDP (1999), EE has been combined with general subjecting teaching since early 1990s; however, it was not until 2009 that the MOET issued a guideline (namely 3857/BGDĐT-GDTrH) that requires the implementation of integrating EE into the teaching of six subjects, including Biology, Geography, Civic Education, Literature, Chemistry and Physics (MOET, 2009).

One of the drawbacks of the current EE programs pointed out by UNDP (1999) is that the focus in many educational institutions in Vietnam was on disseminating information *about* the environment. This type of education is designed to develop people's knowledge, but not necessarily influence their attitudes, including their motivation and commitment to environment protection. At primary and secondary school level, lessons touching upon environmental issues, to some extent, succeed in conveying "moral" messages which aim at influencing students' attitude. Examples of moral messages are "we have to protect our forests" and "we should

control our waste dumping into environment". These moral messages are very general and do not have much impact on citizens' behaviors.

In urban areas, littering is still very popular. In rural areas, logging is not well controlled. For the past few decades, deforestation has accelerated significantly (TRAFFIC, 2005). According to UNDP (1999), Vietnam's forest cover has fallen from 43% of the total land area in 1943 to 28% in 1993. Rivers and lakes have been polluted severely due to human activities. A typical example of mass industrial sewage dumping is the case with Vedan Vietnam, a food manufacturer. In 2008, Vedan Vietnam was accused of releasing 100.000 m3 of industrial sewage per month during the course of 14 years directly into Thi Vai river without any treatment, which made the river so deadly polluted that no living things can live in. However, after this scandal, Vedan's products continue to be well sold in Vietnam. This fact shows that Vietnamese consumers generally do not take into account the criterion of "environmental friendliness" when they go shopping. To a certain extent, it can be said that Vietnamese citizens have poor awareness of environment protection, or their awareness is not integrated in their behaviors.

In summary, the concern for EE has been accelerated for the past twenty years; but there has not been much progress in Vietnamese citizens' environmental awareness and behaviors. There are a lot of things to be done to improve the effectiveness of EE. However, in order to specify what exactly should be done it is necessary to understand how EE is conducted at school. But the question of how EE is conducted in Vietnamese schools has not been addressed thoroughly. Not much research on EE in Vietnam has been done. Online accessible scientific studies on EE in Vietnam, which are mainly in the form of unpublished MA or PhD dissertations, generally focus on conducting EE for certain groups of students using certain pedagogical approaches (e.g. Hoang, 2010; Pham, 2010; Pham, Nguyen & Dinh, 2012). Regardless their weaknesses in validity and reliability, these studies are still valuable to the extent that we can have a sense of what other

EE teachers are doing. But we need more insightful knowledge so that we could work to enhance the effectiveness of EE in Vietnam.

#### 2. Challenges for EE high-school teachers

From the school year 2009-2010, teachers of six subjects including Biology, Geography, Civic Education, Literature, Chemistry and Physics are required to integrate EE in their teaching (MOET, 2009). It should be noted here that no teachers were formally trained to teach EE in their pre-service teacher education. In 1998, Project VIE/98/018 funded by UNDP started to help the MOET develop the system of teacher training using the EE guidelines (UNDP, 1999). But there is no official information about the inclusion of EE guidelines in teacher training programs in Vietnam. Unofficial information reported by teachers and teacher educators reveals that EE has not been made a part in their pre-service teacher training.

Besides the lack of formal training in EE, there are other constraints on teachers' implementation of integrating EE. First, the guideline issued by the MOET is not detailed in guiding teachers how to integrate EE and which content should be integrated. Second, in-service training programs have been delivered, but very few and far between, and not all teachers have opportunities to attend these programs. Third, textbooks and curricula have not been modified to match with new requirement. The project PARC in National Park Yok Don has developed a series of textbook for EE at primary and secondary schools, but there is no information when this textbook series will reach the hands of students and teachers (reference?). In sum, the majority of high-school teachers are carrying out their mission of integrating EE as required by the MOET in the condition of little guidance and training.

## 3. Research purposes:

In such a teaching context described above, Vietnamese high-school EE teachers have to construct their own ways of doing from their own intuition and experiences. Their ways of teaching are not necessarily ineffective because

teachers can learn how to do their job well from their own practices. From a Socio-cultural perspective to teacher education, it is through the participation into social practices of teaching and learning rather than through accumulating theoretical knowledge that teachers can learn how to teach (Johnson, 2009). But it is obvious that teachers need support during their process of teaching and learning how to teach.

In order to find out what kind of support that Vietnamese high school EE teachers need, we should know what they are doing in their classrooms (their classroom practices), and more importantly, we should have insights about the thinking hidden underneath their practices. With that aim in mind, we propose a study to investigate teachers' perceptions and practices of EE integration through their self-reporting.

Understanding teachers' practices from their self-reporting is two-fold in purpose. Firstly, it helps us to understand their practices better than using an outsider to evaluate their practices because teachers' actions can only be thoroughly understood if the intentions underlying their actions are revealed by teachers themselves (Hart, 2003). Secondly, teachers have opportunities to make their voice heard and to hear from their colleagues so that they can learn from their colleagues' practices and have a sense of sharing. A sense of sharing is important for Vietnamese high-school teachers because they are the pioneers in the field, and therefore, are likely to feel isolated in their classroom world.

A more important purpose of our study is to understand teachers' perceptions through their reflections about their practices. According to Borg (2003), teacher perception is a term under a bigger umbrella term – teacher cognition. Borg's (2003:81) definition of teacher cognition is 'the unobservable cognitive dimension of teaching- what teachers know, believe, and think'. According to Borg (in Briello, 2012, p.88), "if we want to fully understand what teacher do, we can't just focus on behaviors, we need to know what they believe, what they know, their beliefs, their feelings and attitudes". The assumption underlying this idea is that

Floden & Klinzing (1990) similarly state that an understanding of the characteristics of teachers' thinking is thus an essential component in providing a more complete account of teachers' actions. Understanding teachers' thinking not only helps us to understand teachers' teaching practices, but according to Clark (2005), it also helps to bring insights into teachers' learning how to teach. This kind of insights is very needed in the field of teacher education. In the same vein, the knowledge gained from our proposed study is expected to inform professional development programs for Vietnamese high-school EE teachers, who obviously need some kind of support to their professional development.

The questions that guide our inquiry are formulated as follows:

- i. What do Vietnamese high-school EE teachers self-report about their practices of EE integration?
- ii. What are their perceptions of the nature and purpose of EE revealed through their reflections about their practices?

## 4. Research Methodology

## 4.1. Research Paradigm

The proposed study works within the constructivist paradigm, which endorses the view that "there is no unique real world that preexists and is independent of human mental activity" (Bruner, 1986, p.95); but rather reality is constructed in the minds of individuals (Lincoln & Guba, 1985, as cited in Schwandt, 1994).

According constructivists, the observer cannot and should not be separated from the observed in the activity of inquiring into constructed realities (Guba & Lincoln, 1989, as cited in Schwandt, 1994). In this study, I work as an observer who has an interactive relationship with the issues investigated at all stages of the investigation. In the first place, the research problems are identified based on my subjective experience and perspective. Moreover, my values are also reflected through the data collection instrument I devise and the way I conduct the data collection process. Most importantly, the research findings are a result of my own interpretation. Similarly, the participants in this study are the observers and the

observed is their own practices of environmental education and their perceptions of the nature and purposes of environmental education.

One might question the truth gained from a study which involves subjective values of the researcher and the participants. However, from a constructivist perspective, constructed realities "are not more or less true, but simply more or less informed or/and sophisticated" (Guba & Lincoln, 1994, p.111). The proposed study worked towards a more informed and sophisticated construction of understanding regarding the issue investigated rather than gaining any generalized truth. The point here is that the more informed we are about a issues related to environmental education in Vietnam, the more likely we are to get it improved.

#### 4.2. Research design

The proposed study adopts a qualitative research design. According to Creswell (2007), the conditions under which qualitative research is used include 1) when research problems require a complex detailed understanding; 2) when participants are empowered to share their stories and make their voices heard; and 3) when there is a need to understand the contexts in which participants work and live. With reference to Creswell's account, a qualitative approach was believed to be suitable to address the research problems investigated.

# 4.3. The participants

The study was drawn on the participation of 12 university lecturers who work in the field of earth sciences. They were contacted where they were taking part in a 10-week training course related to sustainability development and climate change in Monash University. Their ages ranged from 26 to 46. Five of them were male. Five of them got PhD degrees, one was a PhD candidate and the rest of six participants were MA holders.

#### 4.4. Data collection

The main instrument for data collection was semi-structured interview. Interviews were conducted individually and recorded for later transcription. Each interview lasted between 30 and 60 minutes. The language used was Vietnamese because

using mother tongue was thought to make the participants feel safe and comfortable so that their true thoughts could be disclosed.

Teacher thinking is tacit. Much of teacher knowledge is gained through experience and is not articulated clearly by many teachers. Experienced teachers appear to know very well what needs to be done in their classrooms but often find it difficult to describe deeper reasons which they say they simply haven't *thought about*. Therefore, it is necessary to develop a procedure & theoretical framework to go inside teacher head, to get the core of fundamental values and assumptions that drive teachers' practices.

Interviews should begin with question about what was going on in teachers' classroom and then ask why in light of Butt's (1990) method of autobiographic inquiry. Butt (1990) asks teachers to ask four basic questions: 1) What is the nature of my working reality/context? 2) How do I think and act in that context and why? 3) Why, through my work-life experience and personal history did I come to be that way? 4) How do I wish to become in my professional future?

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