A Curriculum Analysis of Teacher Education Programmes/Courses on Education for Sustainable Development (ESD)

● Background information

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Our understanding of ESD is that there are many undesirable factors/elements/variables which co-exist with humankind and have become global issues that need to be addressed. Years it may take, ESD is a means to minimise or even eradicate those undesirable aspects on planet earth so as to sustain the existence of human race.

Name of city and country: Macao SAR, China

Name of institution: Faculty of Education, University of Macau

Languages used in medium of instruction: Cantonese, Mandarin, English, Portuguese

There is no national curriculum on teaching training in Macao SAR, China.

Our institution trains teachers for pre-schools, primary schools, secondary schools and those who would like to teach and conduct research in higher education institutions.

There are 23 provinces, 5 autonomy regions, 4 core cities and 2 special administrative regions in China. In each of these places, the number of teacher training institutions varies. In Macao SAR, the two teacher training institutions include: the Faculty of Education of the University of Macau, which offers full time degree programmes for pre-service students, and a local secondary school, which offers diploma programmes for in-service teachers, are.

Even though our country does not have a fully recognized national policy on education AND sustainable development; however, under the ‘one-country-two-systems policy’ which governs the Macao Special Administration Region, the issue of sustainable development has been raised in the Chief Administrator’s Policy Addresses and the Macao government has attempted to reach the goals of SD at the municipal level. There is yet no specific programme on education for sustainable development in schools in Macao SAR.
ESD is not yet fully featured in our institution. Yet, some courses do cover topics related to the social perspective (such as basic human rights and social justice), intangible heritage (such as preserving linguistic diversity) as well as sustainable urbanization (such as waste reduction, issues of pollution).

To certain extent, our institute has taken steps in attempting to address ESD in its teacher training curriculum such as providing electives on those topics. However, local schools are still primarily concerned with the mastery of professional skills and knowledge of their teaching staff.

**Aims and Objectives**
Generally speaking, the mission of our institution’s training curriculum is to provide our pre-service student teachers and in-service teachers with a broad knowledge base and a set of teaching skills necessary for their teaching career. There is an emphasis on introducing ‘new’ educational ideas and approaches to the teaching community while meeting the expectations of the Macao SAR government and also local schools. As mentioned above, there are courses that cover or touch on issues pertaining to the ideas of sustainable development in the forms of elective courses.

**Approach**
The approach that our institution uses to including ESD in its curricula is still patchy where there is consistency in the primary and pre-primary school teacher training programmes only. The ‘Whole School/Institution’ approach has not been adopted. In general, our institution is an independent entity in terms of teacher training, hence the involvement of other social groups in the work of teacher training vis-à-vis ESD is limited. Meanwhile, there are ample opportunities for staff and students in our institution to engage in research as funding is not an issue. The kinds of enquiry include oral history, applications of teaching methods in music, studies on mathematics, health and sports, and cultural issues (such as facilitating communication and collaboration between Filipino and Chinese children in Chinese classrooms).

There are various Master programmes for teachers after their graduation. These programmes include School Counseling, Curriculum Design and Instruction, School Administration and Education Psychology.

**Content**
The contents of our teacher training programmes offered by our institution relate to certain topics advocated by ESD directly and indirectly. For instance, there are courses that cover issues of human rights, good governance, health, cultural and linguistic
diversity, and intercultural and interfaith understanding. While most of our training is subject-based, some are interdisciplinary. For those that are cross-disciplinary, various personal, social and cultural issues are covered. To some extent, local issues and concerns are reflected in the teaching and learning in local classrooms. For instance, there is great concern for global warming, preservation of cultural heritage, health issues, sustainable urbanization and social justice.

- Pedagogy and Assessment
  Various teaching methodologies are employed at our institution in the delivery of teaching contents: lecturing, small group discussions, video-showing, role-playing, field trips are some of them. This variety of pedagogies is often employed at the primary and pre-primary teacher training courses. If ESD is included in the curriculum, we would also employ a variety of pedagogies. Taking health education as an example, lecturing is needed; however, showing videos on the development of health problems will be more dramatic and impressive for our students, follow-up group discussions will later provide students with opportunities to express their personal feelings on health issues and self-image. In our institution, students’ self-assessment is often carried out in terms of reflective thinking. Other forms of assessment include practicum, term projects and final examinations.

- Resources
  ESD-oriented teaching resources/material is often limited to printed matters and videos.

- Outcomes
  From our observation/assessment, the ESD part of the curriculum can highlight global issues and arouse students’ awareness of these issues. If ESD is to become a separate discipline, we reckon that it would not be easy to look for an academic who can handle all the issues concerned. That is, the course will have to be a shared one. In terms of sustainability literacy, we can say that our programmes are taught mainly in our native language, Cantonese, while some are taught in one of our official languages, Mandarin. But in writing, traditional Chinese is still in use.

Our institute would be interested in incorporating ESD into the existing programmes when they are being re-structured. Other alternatives include organising workshops and seminars which can be arranged in flexible manners.