A Gender Inclusive Curriculum Model for Environmental Studies

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ABSTRACT

This paper presents a gender inclusive curriculum model for environmental studies at the senior secondary level. The curriculum model is based on three sources of information about gender and environmental studies: ecofeminist theory concerning Western constructions of the humanity–nature relation, socialist feminist critique of academic and professional practice in the environmental disciplines, and an analysis of syllabus documents produced for senior secondary environmental studies courses in South Australia and Victoria. The model includes recommendations concerning the representation of the concept 'environment' in the syllabus, the portrayal of women in the syllabus, and the pedagogic and assessment strategies promoted in the syllabus.

Recent years have seen a significant elevation in the profile of school-based environmental education. Changes to educational structures and policies within many States should have the result of more firmly securing a place for environmental studies within school curricula. Simultaneously, gender equity and the education of girls have become prominent social justice concerns at the primary and secondary levels. There has been substantial progress in identifying gender issues at the senior secondary level, particularly in the English, Mathematics and Science subject areas. In contrast, there has been very little research on gender and environmental studies. Feminist debate is only just entering the formal agenda for environmental education in Australian schools.

In a previous issue of this journal Greenall Gough (1992) identified gender as a neglected topic in environmental studies. She stated "it would seem appropriate for feminist perspectives to be considered in environmental education practices". Peck (1992) has described the need to address gender issues in environmental education as "urgent", and has rued the scarcity of work on gender and environmental studies compared with the recent focus on gender in other curriculum areas.

Concern for increasing the participation of women and girls in non-traditional areas of education and employment can serve to divert attention from their marginalisation in areas where they are numerically well represented. The relatively high proportional participation of females in environmental studies courses at all educational levels may be masking the need to examine ways in which current environmental education practices could be disadvantaging women and girls. Because it has been demonstrated that females are usually more concerned than males about environmental problems (Brown 1995, Brown & Switzer 1991, New South Wales Environment Protection Authority 1994), Peck (1992) has suggested educators may have assumed that environmental studies curricula are inherently "female friendly" and that there are therefore few gender issues to be addressed in environmental education.

The neglect of gender issues in environmental education parallels their neglect within the environmental movement. In Australia, the majority of the members of environmental activist organisations and of community-level environmental campaigners are women (Elix 1989). Recently women have also begun to occupy leadership positions in some environmental activists organisations. Nevertheless, the 1995 Women and the Environment Conference convened in Melbourne by a coalition of Australian environmental activist and women's organisations, including Greenpeace, Australian Conservation Foundation, Greening Australia, the Wilderness Society, the World Wide Fund for Nature, the Victorian Women's Trust and the YWCA, was mainly intended to persuade academic and other professional women to support conventional environmentalist concerns, such as natural resources management, biodiversity conservation, and control of greenhouse gas emissions. Attempts to raise gender issues in the workshops on these concerns were treated as irrelevant or disruptive by workshop leaders. This may be because, as Australian research has shown (Elix 1989), the majority of environmental activists with significant public profiles and of professional environmental 'experts' who are in the position to set policy priorities and define national environmental debate are men.

During the late 1960s and early 1970s, feminists concerned about the lack of gender equity in the environmental movement began to make connections between their concerns and the concerns of those other critics of conventional environmentalism who were calling themselves 'revolutionary' or 'radical ecologists'. The result was 'ecofeminism', theoretical discourse and political action focused on woman's role in the humanity–nature relation (Merchant 1992).

Ecofeminists argue that conventional environmentalism, in both its academic and activist forms, is a product of Western societies and, therefore, like all other institutions of these societies, both reflects and reinforces Western gender roles and gender relations. In particular, conventional environmentalism reflects and reinforces the gendered character of the humanity–nature relation in the West (Taylor 1991).

Ecofeminism is pluralistic, incorporating elements of ideologies ranging from liberal to poststructural. Nevertheless, most ecofeminists make certain fundamental assumptions about the character of the humanity–nature relation in Western and Westernised societies. The essence of these assumptions is that the Western philosophical tradition of 'transcendent dualism' has systematically distorted Western conceptions of humanity and nature in ways that exclude women from full participation in the human realm (Ruether 1992). As explained by Taylor (1993), Western thought identifies women with the realm of human physicality and the human body, which is the assumed locus of 'human nature', that part of nature termed by Taylor 'nature-within'. As an extension of the supposed bodily limitations on their participation in the production of culture, women are also identified with the non-human realm of material existence, that part of nature termed by Taylor 'nature-without'. In contrast, men are identified with the realm of human rationality, the human mind and spirit, and with the human-created realm of culture; these are the realms which are assumed to be definitive of the fully human being. Women, physicality and nature are constructed as inherently inferior in value and inevitably subordinate in power to men, rationality and culture because of the Western belief that true humanity is achieved only when the rational human mind transcends and dominates both 'nature-within' and 'nature-without' in the production of culture.

The insights of ecofeminism provide a theoretical foundation for the empirical work of other, mainly socialist, feminists who are developing a comprehensive gender analysis of academic and professional practice in the environmental disciplines (Johnson 1989, Rose 1993, Weisman 1992). This paper presents the results of research combining ecofeminist theory with socialist feminist praxis to develop a gender inclusive curriculum model for environmental studies at the senior secondary level.

The model was developed in the context of a study by Whitehouse (1993) on gender and environmental studies in senior secondary schools. This study involved a gender analysis of syllabus documents from South Australia and Victoria. The documents analysed included:

- the South Australian *Environmental Studies Stage 1 Extended Subject Framework (ESF)*, for a course accredited in 1992, and *Natural Resource Management Year 12 (Stage 2) Detailed Syllabus Statement (DSS)*, for a course first accredited in 1986 and re-accredited for the South Australian Certificate of Education in 1992
- the Victorian *Environmental Studies Study Design* and *Environmental Studies Course Development Support Materials*, for a course accredited in 1991

Gender Inclusivity and the meaning of 'environment'

The gender inclusive curriculum model presented in this paper assumes that environmental studies is concerned with the relations between people and their environments. The model reconceptualises these relations to make the knowledge of women and knowledge about women explicit in environmental studies curricula. The two main findings of Whitehouse's (1993) analysis of syllabus documents underpin the model. The first finding is that women are either absent or marginalised as both the 'knowers' and the 'known' in current Australian environmental studies curricula. The second finding is that the term 'environment' needs to be defined so that its usage within syllabus and classroom discourse is truly inclusive of human environmental experiences and not exclusive of the experiences of women.

Defining 'environment'

'Environment' is the central concept in environmental studies and yet this concept is incompletely theorised within environmental education literature and syllabus documents (Di Chiro 1987). Whitehouse (1993) demonstrated that inconsistencies in the conceptualisation of 'environment' were characteristic of the syllabus documents she analysed. 'Environment' was represented as an entity both inherently singular - 'the environment'—and inherently plural—'environments'—within the one syllabus document. The South Australian *Environmental Studies Stage 1 ESF* mentioned "learning about the environment", and within three pages stated that "environments can be identified by their location or essential characteristics". The South Australian *Natural Resources Management Year 12 (Stage 2) DSS* referred to the concept 'environment' throughout as 'the environment'. In the Victorian syllabus documents, 'environment' was represented as both singular and plural within the one set of Aims. For example, one aim was for students to "develop an understanding of the structure and function of a range of environments" and another was for them to "develop proposals for protection of the environment" (Victorian Curriculum Assessment Board 1992).

In writing and speaking about environmental studies, educators commonly equate 'the environment' with 'the natural environment' conceptualised as a singular entity having an autonomous existence outside human society and external to human presence and influences. This 'nature-without' is viewed as the medium which societies use to construct themselves, and thereby convert the natural into the human made and human modified. It is the consequent loss of 'naturalness' that is the main focus of concern in environmental studies curricula. Environmental education commonly promotes action for and on behalf of 'the environment', treating nature as the primary victim of environmental problems (Taylor 1993).

Whitehouse (1993) found that the syllabus documents she analysed consistently characterised 'environment' as being 'natural'. The South Australian *Environmental Studies Stage 1 ESF* recognised that "human beings are a part of natural systems", but then stated that for the purposes of study a distinction would be made between human and natural systems. The South Australian *Natural Resources Management Year 12 (Stage 2) DSS* set humans apart from the natural world, but also advocated a human "partnership with nature". The Victorian syllabus documents constructed environments as biophysical associations where non-human beings dwell. These environments are subject to human impacts, but humans are not characterised as being present within them. A conceptual diagram included in the Victorian syllabus depicts human impact as completely external to environmental function (Victorian Curriculum Assessment Board 1992).

At this time in human history, it is ecologically indefensible to assume that existing societies have a natural environment or natural environments located somewhere on the planet beyond the current extent of human presence and influences. The environmental impacts of today's societies are global in scale and the Earth's 'ecosphere', or zone of life, is now entirely human made or human modified in character. Humanity's environments are more accurately viewed as encompassing that portion of nature, that is, of non-human existence, which is included within our societies and which, as the material basis of social life, therefore directly affects and is directly affected by social processes. There is no pristine nature left, either within humanity's environments or, at least on this planet, outside humanity's environments and threatened with inclusion in them (Taylor 1990).

Understanding that humanity's environments are positioned within the boundaries of human societies leads to the understanding that the concept 'environment' has both material and experiential dimensions. 'Environment' is both a place and a repository of meaning (Tuan 1977). All societies, indeed all the members of a society, are continuously reshaping the places they inhabit and the meanings they assign to these places. 'Environment' is therefore plural not singular. There is no one environment —'the environment'; there are multiples of environments.

When humanity's environments are viewed as social constructs or, as Di Chiro (1987) called them, "conceptual interactions", it becomes apparent that environmental problems are social problems. They are not problems 'with nature', but problems 'with society'. Consequently, they are problems that can not be solved simply by 'fixing' nature. Instead, they are problems that can only be solved by changing the ways that societies interact with their environments through their environmental perceptions, behaviours and agencies.

Environmental educators commonly assert that the establishment of environmental education in schools is one means of trying to arrest the current rapid rate of global environmental deterioration. It is apparent from syllabus documents that a primary aim of most environmental education is to assist school students towards increased awarenesses of the severity of environmental problems and of the roles they can play in their solution (Whitehouse 1993). Before problems can be solved, they must be adequately defined and understood. Placing people in the centre of their own socially constructed environments provides students with a powerful tool for analysing environmental problems. This is more likely to identify the real sources of environmental solutions than the common practice of Australian environmental education syllabuses that present 'the environment' as 'nature' placed in binary opposition to humanity. "If human social relations create the problems, they can also change and improve them" (Di Chiro 1987).

In addition, a curriculum exploring the social dimensions of environmental problems from a feminist perspective will present students with a more socially inclusive comprehension of humanity's environmental experiences than conventional curricula that consider 'man' as equivalent to human (Di Chiro 1987).

Including the experience of women

Just as humanity's many environments tend to become 'the natural environment' within environmental education discourse, humanity's various environmental relations are commonly treated as a singular and apparently socially inclusive entity, 'the humanity–nature relation', in this discourse.

The ecofeminist analysis presented in the introduction to this paper implies that Western constructions of humanity exclude from the humanity-nature relation women's environmental perceptions, behaviours and agencies, as well as the environmental perceptions, behaviours and agencies of other inferiorised and subordinated social groups that are feminised in Western thought. It is the environmental relations of the dominant men in Western societies that are treated as the norm for 'man' (Taylor 1991).

Although differences mediated through class, ethnicity, age, sexuality, ableness and other socialising factors are also significant, environmental perception, behaviour and agency all are strongly gendered in Western societies (Anderson & Gale 1992, Brown 1995). Women and men perceive their environments differently; they behave differently in response to them and they direct different kinds of intentions and actions towards them. To some extent, men and women even inhabit different spatial environments within the same society (Rose 1993). Further, the kinds of environment and environmental relation associated with women—the feminine—are perceived to be inferior and subordinate to the kinds associated with men—the masculine (Weisman 1992).

Western gender roles and gender relations construct women as belonging primarily *in* the domestic sphere of society, while constructing both the domestic and public spheres of society as belonging primarily *to* men. Women's environmental, and social, relations are considered to be properly exercised through the domestic institution of the family, which is embedded within the larger public institutions formed mainly by associations of men. Both domestic and public environments are considered to be literally and more or less exclusively 'man made and managed', while the environmental relations that characterise social institutions within the public sphere are considered to determine all environmental relations (Taylor 1990).

The discourses of environmental education, even when couched in gender neutral language, are concerned with 'man's environment' and 'man's environmental relation', where 'man' represents an incomplete and distorted model of what it is to be human. Not only women's environmental experiences, but most of humanity's environmental experiences, tend to be hidden from the students of environmental studies by environmental studies curricula (Gough 1996).

Whitehouse (1993) noted that none of the syllabus documents she analysed recognised that societies construct their own environments, and that different social groups have different environments and environmental relations. The human dominated environments of urban, industrial and rural-agricultural areas were not strongly promoted as areas of study. Most of the topics suggested for study were either impending global ecological disasters, such as ozone depletion, acidification of the ecosphere and deforestation, or the impacts of specific human activities. The latter activities were predominantly public sphere, traditionally male dominated and exploitative ones, such as mining, fishing, wood chipping and paper pulp making, presented as impacting on 'the natural environment'. Thus the environmental relations portrayed in the syllabus documents were largely masculine relations. The domestic sphere was completely absent from the syllabuses, despite the impacts household practices have on recycling, storm water runoff, urban conservation, energy consumption and consumer behaviour, to list just a few of the topics that could be specified within syllabus guidelines.

Gender neutral language was used in all the syllabus documents, even in cases where the gendered terms 'women' or 'men' would have been appropriate. As a result, the use of non-gendered terms like 'human' and 'people' had the effect of rendering women invisible where they should have been highlighted. For example, when the syllabus documents mentioned topics such as Third World subsistence farming, they identified the farmers as non-gendered 'people' and failed to specify that women do almost all subsistence farm work. More generally, the use of gender neutral language had the effect of disguising the masculine bias of the curricula.

Feminists researching environmental disciplines concerned with urban areas have provided insights on ways of including the experiences of women that have been essential to the development of the gender inclusive curriculum model for environmental studies proposed by this paper. Working mainly from a socialist feminist perspective, these researchers have developed a critique of the many ways in which urban environments have been "conceptualised and built in the interests of men and to the disadvantage of women" (Johnson 1989). This critique has begun to transform educational practices in disciplines such as geography (Rose 1993) and architecture (Weisman 1992), but as yet has had little impact on environmental studies, perhaps because of the natural science bias of most environmental studies curricula (Whitehouse 1993).

Four main kinds of research project typify this critique. As described by Taylor (1993), the first kind of project consists of documenting and analysing the under-representation of women, particularly at the innovation and decision making levels, in environmental teaching, research, planning, management and activist organisations. The second kind of project goes beyond these 'equal opportunity' concerns to argue that the knowledge base of conventional environmentalism is primarily men's knowledge of men's environments and environmental relations. A complementary aspect of this kind of research project is the acquisition of women's knowledge of women's environments and environmental relations.

The third kind of project follows from the second and seeks to demonstrate that most domestic and public environments are not only literally 'man made and managed', but that, because they are 'man made and managed', they exclude, discriminate against and are unhealthy for women in innumerable ways. The fourth kind of project affirms that women are not mere victims of 'man made and managed' environments. This kind of project involves discovering and describing examples of women's environmental agency. Of particular interest are examples of women creating environments for themselves, and examples of women's vital role as environmental managers in all domestic situations from the suburban home to the homelands of the world's remaining indigenous peoples.

The gender inclusive curriculum model

The gender inclusive curriculum model for environmental studies at the senior secondary level suggested in what follows has three parts: the representation of the concept 'environment' in the syllabus, the portrayal of women in the syllabus, and the pedagogic and assessment strategies promoted in the syllabus. The arguments for the first two parts have been presented in this paper. The third part has been adapted from Whitehouse and Sullivan (1992) and Whitehouse (1993) as essential to the implementation of the first two. The three key principles of the model are as follows.

1. Environments are multiple, material, experiential and socially constructed

Multiple. The syllabus does not represent the concept 'environment' as a singular entity 'the environment', but recognises the multiplicity of the concept through the use of the plural 'environments'.

Material and experiential. The syllabus recognises that human environments are both the places inhabited by individuals and groups of people as well as the meanings attached to these places by their inhabitants.

Socially constructed. The syllabus emphasises that people continuously reconstruct both the material and experiential dimensions of their environments through their environmental perceptions, behaviours and agencies.

2 .Women are: visible, normative, central, representative, whole, heterogeneous and relevant

Visible. The syllabus presents women as active members of society whose environmental relations are made visible through curricula. Domestic and public environments are given equal prominence so that women are not rendered invisible by their domestic roles and the gender inequities which result in the devaluing of their domestic work. At the same time, the syllabus recognises that women and men move between the domestic and public spheres to such an extent that this is an increasingly artificial gender division in most societies.

Normative and central. Women and girls are depicted in the syllabus as explicitly female; they are not presented as normatively male, or part of 'man', nor are they presented as neuter, or part of a genderless 'humanity'. Femaleness is the normative state of being for many, and in some cases the majority, of the students who choose to enrol in environmental studies courses (Whitehouse 1993). Further, in a gender inclusive curriculum, women's environments and environmental relations have a place central to syllabus constructions; they are not treated as a special case—marginal, aberrant, the other or the non-male.

Representative. In seeking to describe environmental activism, the syllabus includes examples of women's organisations, especially those concerned with environmental issues at the community level. Environmental actions such as the Chipko Movement (India), Greenham Common (Britain), the Anti-Nuclear Movement (Oceania), the Greenbelt Movement (Africa), Mothers Against Pesticides (Australia), all of which are documented by Merchant (1992, 1996), are specifically identified in syllabus documents as inspired and directed by women. Women's organisations are given a prominent place in the curricula where they are portrayed as undertaking representative environmental actions which are in no way marginal to environmental actions led by men.

Whole. The syllabus does not stereotype women and men according to the Western philosophical tradition of 'transcendent dualism' in which 'woman is to man as nature is to culture'. Although it has become fashionable among environmentalists to portray women, supposedly in a positive way, as 'closer to nature than men', this construction does not truly affirm women (Plumwood 1993). It only continues to limit our understanding of the diversity of people and their interactions with their environments.

Heterogeneous. Women are treated by the syllabus as a diverse group who have a multitude of environments and environmental relations. 'Many people = many environments' (Taylor 1990) is a dominant theme of curricula.

Relevant. The syllabus includes the kinds of environmental problems met and overcome by women in urban and rural settings throughout the world as they live their daily lives. Curricula emphasise that these problems are as relevant to environmental studies as global environmental 'issues'. Indeed, both the causes and cures of global environmental issues often need to be sought within more local arenas. For example Brown and Switzer (1991) suggest that issues such as health and welfare, household management, social policy, and consumer concerns should be a stronger focus in environmental education.

3. Pedagogic and assessment strategies include:

Social criticism. The syllabus encourages students to think critically and reflect on the structural and ideological forces that shape their environments and environmental relations (Huckle 1991).

Values education. The syllabus requires students to explore and challenge values-positions, confront values-conflict, and analyse and clarify their personal values-systems in relation to environmental issues (Hildebrand 1989).

A variety of assessment tasks. As discussed by Whitehouse and Sullivan (1992), the broader and more diverse the assessment tasks on which total scores are based, the more gender inclusive the overall assessment will be. Given its power to drive teaching practice at the senior secondary level, assessment must be consistent with curriculum aims.

Conclusion

The gender inclusive curriculum model for environmental studies presented in this paper constructs women as visible, normative, central, representative, whole, heterogeneous and relevant. In the syllabus documents examined by Whitehouse (1993), there are no women; there are only humans. Females are supposedly included in the use of the term 'human', but the human is still constructed as normatively male (Spender 1985). Women's environments and environmental relations remain hidden within the term 'human', just as they are hidden within the term 'man'. Gender neutrality does not result in gender equity where humanity has not been explicitly reconstructed within curricula to bring forward the environments and environmental relations of both women and men as subjects worthy of study. Only such gender inclusive curricula will affirm that women as well as men are knowers, creators, users and managers of environments.

Whitehouse's (1993) analysis of senior secondary syllabus documents reveals that many changes will be necessary before environmental studies curricula can claim to be gender inclusive. This does not mean, however, that classroom teachers can not take the initiative to introduce gender and environments as a topic of study or to use gender as a way of exploring the social construction of environmental problems. Environmental education is social practice. Di Chiro (1987) made this explicit when she wrote that "environmental education is at the same time a critique of the value components [the politics] of environmental decisions and actions, and itself a political enterprise making judgements on who, where, what and how to educate for the environment".

As environmental educators we need to heed Di Chiro's (1987) call for an examination of our practice and to be critical of the role environmental education may play in "sustaining the social structures and relations that cause or support [environmental] problems".

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