Professionalization and Environmental Education: Is Public Passion Too Risky for Business?

Marilyn Mac Donald, Simon Fraser University, Canada

Abstract

Over the last ten years, the movement to professionalize environmental education has been gaining support from both the supply and the demand sides of the "green" market. Yet the modern ideal of the professional—the autonomous and dedicated expert with ten or more years of university-based training in a discipline derived from the natural and applied sciences—is an ambiguous blend of public-spirited altruism and elitist self-interest. Given the present exemplars of professions (e.g., medicine, law, science), can we professionalize and still retain such goals of environmental education as universal ecological knowledgeability, biosphere-sustaining decision-making, and effective moral maturation?

Résumé

Durant les dix dernières années, le mouvement de professionnalisation de l'éducation relative àl'environnement a été progressivement appuyé par l'offre et la demande du "marché" vert. Cependant l'idéal moderne du professionnel—l'expert autonome et consacré, avec dix années ou plus de formation universitaire dans une discipline associée aux sciences naturelles ou appliquées—est un mélange ambigu d'altruisme inspiré de la nécessité d'un engagement public et d'intérêts personnels élitistes. Étant donné les modèles de professions actuelle (en médecine, en droit, en science, etc.), peut-on professionnaliser tout en respectant les buts de l'éducation relative àl'environnement comme le développement d'un savoir écologique universel, la prise de décision en fonction

de la durabilité de la biosphère, et une réelle maturation morale?

A rose by any other name . . . would still have thorns?

In this paper, I discuss some of the implications of a recent proposal by the Canadian Council for Human Resources in the Environmental Industries (CCHREI) for an umbrella certification process which would apply to the environmental work of a wide range of occupations, including education.

In many ways, this proposal is based on a model of *professionalization* which has evolved over the last 400 years, in a complex interplay of human needs and interests (see Figure 1). In that regard, it is linked to similar proposals from such groups as the National Association of Environmental Professionals (NAEP), and the North American Association of Environmental Educators (NAAEE). Although the CCHREI proposal leans more towards the demand side of the green marketplace, while that of the NAEP, for example, favours the supply side, both rely on a term, *profession*, which remains very resistant to simple and unambiguous definition (Mac Donald, 1995, 1996). Since so much of the debate about the pros and cons of the professionalization of environmental education seems to spring from (or be exacerbated by) that ambiguity, I will take a brief etymological detour to attempt some clarification.

The concept of *profession* is a relatively old one, coming from the Latin, *profiteri*, meaning "to declare publicly" (Allen, 1990). According to Kimball (1992), in its earliest usages from the early Middle Ages to the 1600s, *profession* involved entry into a Christian religious order. In its ideological connection to service and self-sacrifice for the greater good, such profession was also strongly linked to passion—to the sufferings (Latin, *passio*) of Christ and subsequent saints and martyrs (Allen, 1990).

As the term became secularized in the 1700s and 1800s, expanding to encompass law, medicine, the military, the natural/applied sciences, and education, this sense of passionate

Shifts within Knowledge Society

scientization of social action
knowledge industry
authority of experts

Occupational Status and Domain

Image Building Activity

Competing Claims

internal schisms
other professions
supporting occupations
deskilling
government
client education (formal/nonformal)
volunteers/amateurs

Risk Construction

catastrophic
unfamiliar
inequitable
involuntary
dreaded
recent
unknown to science
biased
immediate
irreversible

Body of Knowledge

essential
exclusive
complex
indeterminate
useful

Client-Serving Occupation

client ignorance, incapacity
full disclosure necessary
precedence of client's ends
guidelines - clear, complete, substantive, enforced

Public Recognition

no   yes

Mimic Profession

Autonomy from Client and Employing Organization

no   yes   no

Semi-profession   True Profession   Semi-profession

Potential–Formation–Stabilization

Bureaucratization
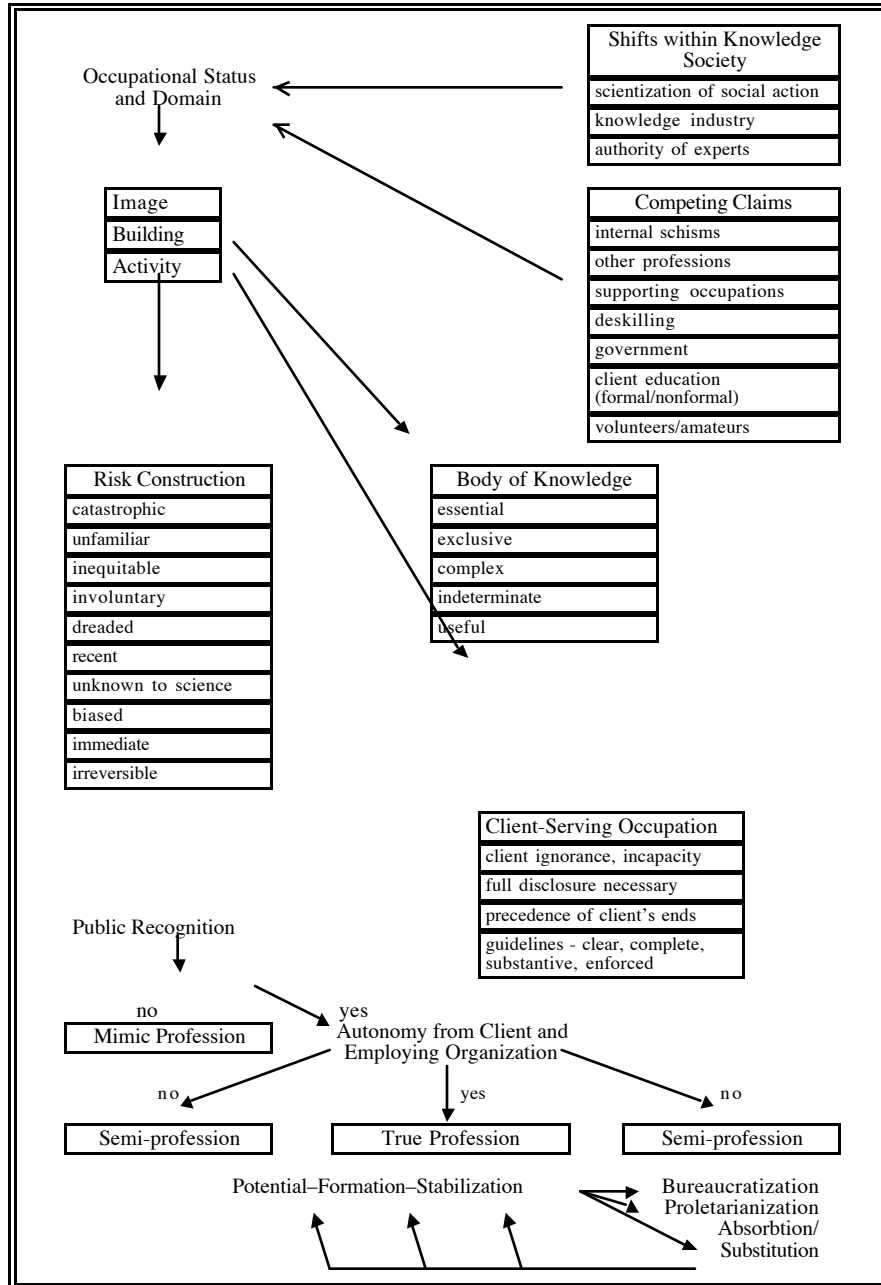Proletarianization
Absorbtion/
Substitution

Figure 1. A model of professionalization (modified from Forsyth & Danisiewicz, 1985, adding concepts from knowledge societies [Stehr, 1994], risk construction [Covello & Johnson, 1987], deprofessionalization [Derber, 1992; Torstendahl & Burrage, 1990] and system of professionals [Abbott, 1988]).

service was retained. It was (and probably had been for the earlier religious, as well) intertwined with more self-interested concerns:

> the extended family of professions bore a special relation to a nuclear family consisting of the three long-esteemed professions—the ministry, law, and medicine. . . . For these three professions had appropriated the gentleman's authority and honor; they also betokened a liberal education, gratifying work, and a secure and comfortable income. (Haber, 1991, p. x)

By the early 1900s, the definition of *profession* had expanded, as researchers and practitioners alike sought to identify the attributes or traits which separated professions from all other occupations. Bulwarked by discriminatory practices involving race, gender, and class, the professions were defined/depicted as much by what they were not, as by what they were.

Professionals were represented as experts in esoteric and vital knowledge, not mere tradespeople who gave their customers what they wanted. The more esoteric and vital the knowledge, then the more ignorant and vulnerable the customer, and therefore the greater the duty imposed on a professional to be trustworthy, competent, autonomous and efficacious. Professionals were *bona fide* experts, not mere prattlers or charlatans who used the language of expertise to deceive for self-aggrandizement. And, professionals were members of a moral community at a time when tradition no longer guided behaviour. So professionals underwent a long and expensive education, were admitted through some form of certification into collegial associations governed by explicit codes of ethical conduct, and devoted some portion of their practice to altruistic pursuits such as *pro bono* work, the sharing of new professional knowledge, and the avoidance of competition with other professionals (Durkheim, 1958; Haber, 1991; Kimball, 1992; Parsons, 1951).

By the mid-1900s, this definition-by-attributes began to change to a definition-by-process, to the concept of *professionalization*—the sequence of occupational changes, the measures of success and failure in implementing and maintaining those changes, the relative importance of a diversity of societal actors, and so on (Figure 1). That is, the focus shifted towards analyses of power, monopoly and status (Abbott, 1991; Derber, 1982; Dingwall &

Lewis, 1983; Johnson, 1972; Larson, 1977, 1984; Pavalko, 1987; Slayton & Trebilcock, 1976; Waters, 1989).

I agree that certain benefits may result for environmental educators if this process of professionalization is successful—for instance, the opportunity for some people to learn more about environmental education through study, research, and collegial exchange of knowledge, and for others to be able to turn to such people for advice. However, if the evidence from other professions holds true for environmental education, such benefits will have significant costs, financial and otherwise. As Collins (1990) pointed out:

> Professionalization thus became viewed as a matter of power, a high degree of success in the struggle for autonomy; the formation of a self-regulating community was seen as the key to such success, and the altruistic codes of conduct put forward by such communities as part of their collective identity in the face of distrustful outsiders. . . . Professions were seen as part of the stratification of society; but instead of being extolled as altruistic and liberalizing, they were critically scrutinized as part of the structure of privilege. (p. 13)

Education, for several reasons, is considered a relatively weak profession (Rich, 1984). For example, many of its practitioners (and certainly, the ones most commonly encountered by most Canadians) are employed by a public school system. Given the nature of bureaucracy, and the minor age of their customers, their professional autonomy is limited. Although their associations (more often unions than strictly professional) are governed by codes of ethics, such codes are often superseded by school board guidelines. Also, it is difficult to define a body of esoteric knowledge peculiar to education, given the service position of educators to the other professions and to the occupations which support those professions. So the more professionally autonomous educators (consultants, university professors) often identify with a different home discipline (e.g., biology) or with a different type of work (e.g., research) (Mac Donald, 1996; Weaver, 1991).

As environmental educators, we need to consider the tradeoffs involved in professionalization—tradeoffs that may become clearer after a closer examination of the CCHREI proposal.

**To professionalize, or not to professionalize,
is that the question?**

On October 30 and 31, 1996, the Canadian Council for Human Resources in the Environment Industries (CCHREI) and Industry Canada (IC) held a conference in Toronto entitled, *Environmental Certification for Competitiveness*. Replete with the keywords of a worldview centred on objectification and the reduction of any explanation of existence to resource valuation, this proposal was an exemplar of a particularly capitalistic interpretation of *professionalization*.

According to a brochure of background information (Anon., undated a; wording taken verbatim from the brochure has been italicized by the author), the conference was to provide an overview of a proposal to *certify environmental practitioners*—those people employed in *environmental protection*, in the *conservation and preservation of natural resources*, and in *environmental education, communications and research* (together constituting the *environmental industries*.

This certification process was part of a larger *government/industry* initiative to strengthen the environment industries' *future domestic and international growth*, to deal with *critical human resource issues* such as shortages of *management skills*, and *technical specialists*. It was aimed at the *stakeholders* in environmental work—the *environmental practitioners* themselves, as well as their *professional associations*, the *educators* from *academia* who train them, the *industries* which employ them or which purchase their work product, and the *government agencies* concerned with *human resource development* and/or the *competitiveness* of the *technology-intensive environmental industries*.

The *certification* was/is to be based on the identification, by CCHREI in consultation with those stakeholders, of *skill-set documentation* and *national occupational standards* specific to *environmental employment*. *Environmental practitioners' discipline-specific* and *discipline-plus competencies* would be evaluated, both initially and periodically, through some blend of academic training and paid-work experience. The requirements for obtaining and maintaining certification would be *harmonized* by a *professionally autonomous, stakeholder-governed Canadian Environmental Certification*

and Accreditation Board, responsible also for the development and enforcement of a *code of ethics*.

The projected benefits from this *environmental certification process* were considered manifold—a *highly skilled workforce, job uniformity, labour mobility, alliances between business and labour, better dialogue between business and the education and training system*—all fostering *the development of a highly-skilled and competent environmental workforce . . . [essential to Canada] . . . if it is to remain competitive in the global marketplace* (Anon., undated a, p. 10).

It is tempting to argue that this market-oriented interpretation is not that of environmental educators, concerned as they/we are with the development in students of environmental sensitivity, ecological awareness, empowerment and active responsibility (e.g., Caduto, 1985; Marcinkowski, Volk, & Hungerford, 1990). Perhaps instead, such an interpretation results from the origins in 1993 of CCHREI as:

> an industry-initiated, not-for-profit Canadian corporation with a mission "to ensure an adequate supply of people with the appropriate skills and knowledge to meet the environmental needs of the public and private sectors." (Industry Canada/Environment Canada, 1994, p. 25)

That is, CCHREI was jointly funded by Human Resources Development Canada (HRDC) and the environment industries to facilitate the production of a highly-skilled and reliable workforce. It was tasked to define environmental employment; to document requisite skills and knowledge; to establish a directory of Canadian post-secondary environmental courses and programs; to set national occupational standards; and, to establish a regulatory board, the members of which were to be drawn from professional organizations, industry, financial organizations, the education/training community, and government. The board was to use those standards to control the quality of labour through certification of the workers and accreditation of the environmental courses and programs in which they trained (Anon., undated, a, d). It would be responsible for the environmental specializations of over 200 occupations in 15 EI subsectors (including education). It would rely on a voluntary, national and "discipline-plus" (i.e.,

added to the certification requirements of one's formal or home discipline, thereby avoiding any negotiations about cross-occupational priority, modification or consistency) system of certification. The balance (or passing grade) of prerequisites, competencies and skills/knowledges could be weighted as deemed appropriate by the board (Kenney, 1996). Such certification could involve any of the four types currently found in Canada, namely training qualification, vocational qualification, reserved title, or licensure (Kenney, 1995).

The focus on occupational standards was in keeping with revisions made by the federal government in 1993 to bring the National Occupational Classification (used by HRDC) and the Standard Occupational Classification (used by Statistics Canada) into concordance with each other, and with a new five-level job classification framework. Except for management (which is simply coded as such, with no consideration of educational prerequisites), an occupation is classified by the assumed entry level of education required for the workers in it (i.e. a university degree for professionals; community college training/apprenticeship for the technical, paraprofessional and other skilled workers; and high school or less for the semi- and unskilled) (Anon., undated, d; Statistics Canada, 1993, c).

This framework was to provide a relatively simple tool with which to determine human resource planning strategies. To professionalize environmental education, for instance, one need only ensure that the majority of educators have a university degree. Unfortunately, it also reinforced existing inequities, divorcing them from their social and historical contexts (Mac Donald, 1995), a point to which I will return below. Within such a framework, education and educators become part of a "just-in-time" paradigm of living on the edge of capital's mobility, in which humans and their surroundings are cogs in the gears of the marketplace. When businesses require a green audit, the workers must be there, waiting to consult. There appears to be no need of, or attention to, changes in consumption, production, and so on, in keeping with the sort of human/environment relationship which might be sustainable. Like the businesses which bring in inventory just-in-time for its use, we come closes and closer to a system with so few buffers, as little extra room, that one small change could be disastrous.

For CCHREI, then, environmental educators are those practitioners who assess the need for, develop and review the curricula of, deliver, and measure the outcomes of environmental education. They work:

> in schools and post-secondary institutions, or for public and private sector training organizations. (Anon., undated, d, p. 4)

They provide education and training about environmental protection, and conservation/preservation of natural resources, with expertise in:

> a wide variety of disciplines, both traditional (e.g. chemistry, biology, engineering, geography, economics etc.) and non-traditional (e.g. wastewater treatment technology, environmental protection technology, environmental health, etc.). (Anon., undated, d, p. 4)

For me, that does not fully represent what I think that I do as an environmental educator, nor what I believe that I need to know to be effective in that pursuit.

For one thing, my understanding of interdisciplinarity includes the social sciences, the humanities, the contemporary arts—the sociological, anthropological, psychological, theological, artistic, musical, literary, historical, philosophical (and so on) explorations of the ways in which we, as a species, have tried to come to terms with existence. For another, I am not sure that training people to be good corporate workers exactly and unproblematically overlaps with developing within people the capabilities to work towards, and enjoy, sustainability. Indeed, if current directions in the reformation of natural/applied science education—Science/Technology/Society and so on—are any indication, then even within a narrower conceptualization of interdisciplinarity, the "workforce training" goal is no longer paramount. Finally, as a feminist, I cannot in all honesty support the development of any economic sector which, in this day and age, could unblushingly announce that approximately 90 percent of its workers were male (Ernst & Young, 1992). However, I cannot dismiss CCHREIs proposal to professionalize environmental education on the grounds that industry and government are

seeking to control and commodify it, when similar ideas have been put forward by such groups as the NAEP and the NAAEE.

To become truly professional, in the modern usage of the term, environmental educators have a three-fold struggle ahead of them. First, they must convince a significant proportion of the rest of society that their knowledge is both worthwhile and too complicated and/or risky for everyone to learn. Second, they must establish clear and enforceable boundaries around that subset of esoteric and practical human knowledge to which they lay claim. Third, they must demonstrate that they are more trustworthy than anyone else—that they are capable of functioning autonomously, both in controlling their work and in taking responsibility for the consequences of their expert advice. I will explore briefly the implications of each of these struggles, and conclude with some of the questions still to be answered.

The World's Really Sick—But I Can Save You:
The Problematization of Everyday Life

Environmental education is both as old as life on Earth, and as new as the early 1970s. In the sense that education is about developing from a latent or potential state, or inferring from available information (Allen, 1990), then educating oneself or others about one's surroundings is as characteristic of living beings as respiration, consumption, growth, reproduction, and ceasing to be. Life has been, and is, engaged in a continual dialogue—developing the schemata, the strategies and actions involved in gambling for existence. From quantities of sunlight to measures of biodiversity, we are embedded in a 5 billion year old web of coevolving and accumulated environmental knowledge. That is, all knowledge—human and others'—is to some extent environmental, with no apparent need for professional protection (Mac Donald, 1986).

However, in the sense that education is about intellectual, moral, and social instruction, especially as a formal and prolonged process (Allen, 1990), then environmental education is still *in utero*, at least for humans living in a global village. In fact, the term itself is less than thirty years old, first appearing in Western academic literature about 1968 (Disinger & Schoenfeld, 1987).

From the 1970s to the 1990s, the United Nations' Educational, Scientific and Cultural Organization (UNESCO) and the United Nations' Environment Programme (UNEP) sponsored conferences and publications to define, and provide specific applications for, environmental education. As Marcinkowski et al. (1990) summarized:

> The ultimate aim of EE is to aid citizens in becoming environmentally knowledgeable and above all, skilled and dedicated for working, individually and collectively, toward achieving and/or maintaining a dynamic equilibrium between quality of life and quality of environment. (p. 1)

Environmental education was expected to be transdisciplinary, holistic and a life-long process. It combined a foundation knowledge of ecological concepts with an awareness of human factors related to environmental decision-making, a competency in critical thinking and values clarification, and an ability to translate such learning into effective action (Caduto, 1985). Other organizations, such as the NAAEE, supported this understanding of environmental education (NAAEE Mission Statement, e.g., Simmons, Knapp & Young, 1990; 2nd page, unnumbered).

Much of the impetus behind this effort came from a story-line of risk, constructed from Malthus' 1797 "An Essay on the Principle of Population," through Darwin's 1859 *Origin of Species*, and Marsh's 1864 *Man and Nature* (and the preservation/conservation debates of the late 1800s, as epitomized by Muir and Pinchot respectively) to Carson's 1962 *Silent Spring*, the Club of Rome-sponsored 1972 *Limits to Growth*, and the United Nations' 1987 *Our Common Future*. Put simply, this story suggested that humans, through a combination of exponential increases in population size and technological opportunism, were soon going to destroy all or most of life on Earth. It has had such an impact that many of the 6 billion of us are worried about the state of our environments, from the local to the global (Dunlap, Gallup & Gallup, 1993). Coupled with beliefs that literacy, in and of itself, is sufficient to increase human welfare, and that most bad environmental behaviour has been the result of moral immaturity and ignorance (rather than dishonesty, maliciousness, or even plain necessity), such a story makes a strong

case for having professional educators teach children to be good citizens (Mac Donald, 1996; Norris & Phillips, 1990).

However, for CCHREI and IC, environmental education has a narrower purpose—to prepare a skilled labour force to enter a projected world market for environmental goods and services of $600 billion by the year 2000 (Industry Canada/Environment Canada, 1994). This narrower purpose is reflected in CCHREIs compendium of some "10 000 environmental courses and over 950 programs from Canadian post-secondary institutions" (Anon., undated, c) It should be noted that CCHREI only compiled what those institutions provided.

Of the 10,000 courses, most are from the pure and applied sciences. Many of these courses appear unchanged from the pre-green 1960s, focusing primarily on scientific information, secondarily on training in related techniques and skills, and infrequently on human cultural factors. Relatively few courses from the social sciences, humanities, arts or fine arts are included in the compendium, and those that are, are specifically about environmental issues. That is, many universities' and colleges' listings included *all* of the offerings of the biology, chemistry, physics, geography, geology and engineering departments, but *only* one course from other departments (e.g., environmental law, environmental economics, environmental ethics). Thus, environmental knowledge and natural/applied sciences knowledge appear conflatable. Knowledge from other disciplines, however, seems important only peripherally and selectively, after scholastic effort. Even though art, music, literature, history, psychology, philosophy, sociology, and religion have provided, and continue to provide, powerful insights into the human/environment relationship those knowledges are largely discounted in CCHREIs compendium of the domain of the professional environmental educator. Interestingly enough, even knowledge about pedagogy/andragogy is downplayed, with relatively few courses contributed to the compendium from Faculties or Schools of Education.

In addition, the concentration on post-secondary institutions is in keeping with the reification of professional knowledge in the university degree. The federal government decision to distinguish *profession* from other occupations solely by a requirement for university-level training (Statistics Canada, 1993, a, b, c) meant that

some 82 out of a total list of 514 occupations were classified as professions, accounting for approximately 2.6 million workers, or 20 percent of the paid-labour force. Universities play a pivotal role in professionalization, not only as a site for the creation and transmission of "leading edge" knowledge, but as gate-keepers, through such taken-for-granted mechanisms such as grade point averages, admission tests, funding support, lock-step career paths, peer review, citation/sponsorship networks, intellectual property. Relatively little credit is awarded for life experience equivalencies.

This combination of academic locus and a narrow, scientistic interpretation of interdisciplinarity could inculcate in environmental educators a technocentric worldview (O'Riordan, 1981) in which progressive change is almost tautological, and competition is considered a positive mechanism for quality control of both practitioners and disciplinary knowledge. Such a worldview promotes the reduction of one's surroundings to a series of problems, soluble with sufficient surveillance and intervention by the appropriate experts. The greater the problem(s), and the more intricate the solution(s), the larger the need for more experts. Yet should we not be educating in environmental education to put ourselves out of, rather than to generate more, business?

"Not In My Back Yard" as Territorial Imperative:
The System of Professions

To professionalize environmental education, clear and enforceable boundaries would have to be established around the esoteric knowledge discussed in the preceding section. Now, given CCHREIs proposed inclusion of 15 subsectors, it would appear that many of the people practicing environmental education are already professionals, but from a variety of backgrounds.

How many potential environmental education professionals are there to target for recruitment? A recent NAAEE membership survey indicated that its members were/are involved in non-formal (37 percent), elementary/secondary school (27 percent), conservation (22 percent), and post-secondary (13 percent) education (E. McCrea, personal communication, April, 1, 1996). Assuming that this ratio of distribution is roughly applicable to Canada, we

can start with the most easily-identified educators (those in the formal educational system) and proceed from there (see Table 1).

Professional occupation	Total #	# Women	# Men
University professor	42 555	12 130	30 425
Post-secondary teacher/assistant	33 795	15 265	18 535
College instructor	83 080	41 240	41 840
Secondary school teacher	158 395	76 075	82 320
Elementary/kindergarten teacher	218 980	179 035	39 945
Guidance counsellor	12 525	7 445	5 075
School administrator	36 510	11 950	24 560
Health/social science consultant*	29 490	16 620	12 860
Ec. devel./marketing consultant*	26 495	11 695	14 805
Education consultant*	13 035	7 735	5 305
Recreation/sports consultant*	11 115	6 875	4 240
Natural/applied science consultant*	9 045	2 590	6 455
Economist *	5 370	1 420	3 950
Other consultant *	3 660	2 025	1 630
Government-unique consultant *	2 040	800	1 245
Business and finance**	207 460	83 490	123 965
Natural/applied scientist**	347 680	64 260	283 420
Health professional**	374 325	289 635	84 695
Social issues professional**	143 885	62 055	81 830
Arts and culture professional**	143 960	79 270	64 690

(* and **: not usually considered to be educators; * referring to consultants whose work may contain an educational component; ** referring to other professionals whose work may contain an educational component)

Table 1. Potential professional environmental educators in Canada, 1991 according to the 1993 Statistics Canada/Employment and Immigration Canada classification for professional occupations.
(Statistics Canada, 1993 a, b, c)

The formal educational system includes university professors, post-secondary teachers and assistants, college instructors, secondary school teachers, elementary and kindergarten teachers, guidance counsellors, and school administrators. If environmental education is truly interdisciplinary, then all of these professionals could potentially contribute something to such a transformative way of understanding. This grouping of educational professionals represented, in 1991, about 586,000 people.

Harder to quantify are the educators corresponding to NAAEE's non-formal and conservation education categories. Included here would be consultants (categories marked with a single asterisk in Table 1). These include policy and program officers, researchers, and consultants in economics, education, economic development and marketing, recreation and sports, health and social issues, natural and applied sciences, government, and other such areas. This grouping represented about 100,000 professionals.

However, based on NAAEE's membership distribution, we are still missing some 780,000 potential professional environmental educators in the non-formal sector. Those missing professionals could be drawn from such areas as the natural and applied sciences, arts and culture, health, and social sciences (categories marked with a double asterisk in Table 1). This grouping included some 1.2 million professionals.

That is, in Canada in 1991, within the system of professionals, we had a pool of about 1.8 million workers, all potential environmental educators, in formal education, consultancies, and other professional occupations. Would it be sufficient professionalization to simply offer a university degree in environmental education and require all such potential environmental education professionals to obtain it? Probably not.

In Canada in 1867, only about 1 percent of the total human population was considered to work in a profession. By the end of the 1800s, this percentage began to increase in concert with the rise of mass production and distribution, bureaucratic corporations, and government/business support of research and development. Changes in health care, public welfare, knowledge organization, primary resource management, urban design, and so on, created a demand for skilled workers, interwoven with a quest for a sense of national identity (Laxer, 1991; Mac Donald, 1991; Petulla, 1987;

Zeller, 1987). The number of professions grew, both as older occupations changed their status and as new discoveries generated new professions (Abbott, 1991; Derber, 1982; Torstendahl & Burrage, 1990; Wilensky, 1964; Witz, 1992). By 1911, 13 percent of the female and 2 percent of the male; and by 1961, 16 percent of the female and 8 percent of the male labour force in Canada were professionals (Bohnen, 1977).

However, the professionalization of any one occupation does not occur in isolation, but rather within the context of what Abbott (1988) termed a system of professionals. A diagram of such a system as it might apply to Canada is shown in Figure 2. In this system, each profession has, and is, engaged in a struggle for existence with every other profession, and the scarce resource of knowledge has been divided up into discrete territories. In ecological terms, the carrying capacity for professions in Canada in the 1990s may have been reached, and a new profession could only be added by a readjustment of territory. Such capacity may even have been overshot, given the disappearance through structural adjustment and globalization of protected niches, and the potential deskilling of professions through advancements in information technologies.

Kultgen (1982), Abbott (1983), and others have suggested that professional codes of ethics provide clues to this territorial imperative, to a kind of competitive displacement. Most codes deal with interprofessional relationships by agreements to recognize and stay within one's area of competency and to refer one's clients to other professionals as needed. Except for the general exercise of reasonable care, such codes impose no substantial ethical obligations to respect the ownership and legitimacy of knowledges other than the professional, or to provide information to those unable to be clients—for example, poor humans, or (as Stone argued in 1987) other beings and sacred places. Against such a system, environmental education, which must take professionals away from their home disciplines, may find it difficult to mark off a clear and distinct body of knowledge.

Abbott also noted that the greater the movement towards individualism and autonomy in any profession, the lower the status of those practitioners whose specialty is oriented towards a public duty (e.g., public health in medicine, community mental health in psychiatry, public defenders in law). Recruitment from other professions to environmental education may be made more difficult
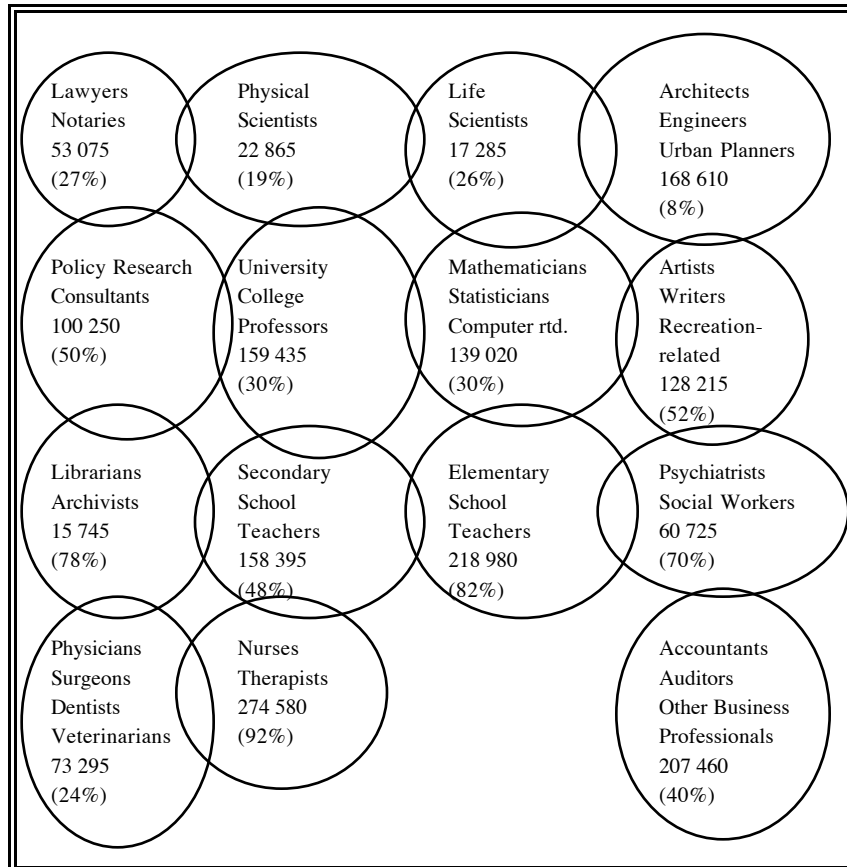
Figure 2. The system of professionals in Canada. Total number of workers and percentage of women workers are shown for each category. Following Marshall (1989), occupations are considered to be male-dominated where the percentage of female workers falls below that in the total labour force (e.g., 45% for 1991). (Based on Statistics Canada, 1993 a, b, c)

by its purported commitment to public service (i.e., empowered citizenry, equitable sustainability).

Moreover, Abbott's (1988) concept of a system of professionals paid little attention to the interactions of professional occupations upwards and downwards within the stratified labour force. That is, workers in professional occupations also struggle with those in occupations which support the professions (e.g., technicians) over the nature, content, remuneration and control of that supporting work. At the same time, professionals in bureaucracies interact with management in relation to work performance and autonomy, and often become managers, bringing with them their understanding of professionalism. For Canada, some idea of the size and composition of these two layers is given in Figure 3. Any strategic consideration of the professionalization of environmental education would have to take into account the impacts on, and effects of, these other occupations as well.

Second, Abbott (1988) did not include in the system of professionals those people outside the paid-labour force (e.g., volunteers, activists, family members) who nonetheless are affected by, and maintain that system. For instance, according to Dunlap et al. (1993), 12 percent of the total population in Canada were members of environmental groups (or 3.3 million potential environmental educators). An unknown percentage of these volunteers would have been professionals, and an equally unknown, but probably higher, percentage would have practiced environmental education. Or consider Duchesne's (1989) revelation that about 27 percent of Canadians over the age of fifteen do volunteer work with formal volunteer organizations; and about 66 percent of Canadians do informal volunteering. Of the formal volunteer work, only about 2 percent was directly identified as environmental. Other types of volunteer organizations included health, education, law, recreation, religion, arts and culture, and public benefit. Considering the interdisciplinarity of environmental education, then some percentage of the work done in those organizations should be both educational and environmentally-related. A similar argument could be applied to informal volunteering.

Thus, to the extent that professionalization is a strategy to increase the financial returns to workers of a particular occupation, then environmental educators are faced with the formidable task
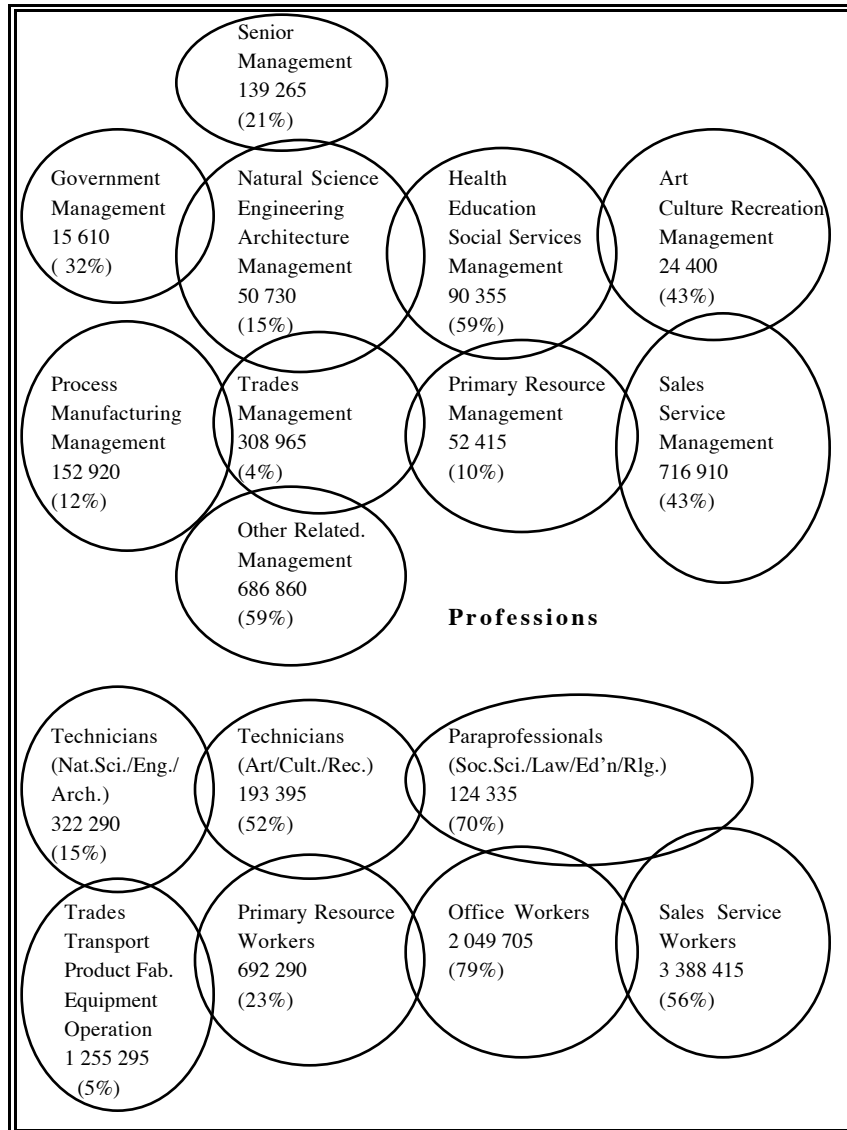
Senior
Management
139 265
(21%)

Government
Management
15 610
(32%)

Natural Science
Engineering
Architecture
Management
50 730
(15%)

Health
Education
Social Services
Management
90 355
(59%)

Art
Culture Recreation
Management
24 400
(43%)

Process
Manufacturing
Management
152 920
(12%)

Trades
Management
308 965
(4%)

Primary Resource
Management
52 415
(10%)

Sales
Service
Management
716 910
(43%)

Other Related.
Management
686 860
(59%)

Professions

Technicians
(Nat.Sci./Eng./
Arch.)
322 290
(15%)

Technicians
(Art/Cult./Rec.)
193 395
(52%)

Paraprofessionals
(Soc.Sci./Law/Ed'n/Rlg.)
124 335
(70%)

Trades
Transport
Product Fab.
Equipment
Operation
1 255 295
(5%)

Primary Resource
Workers
692 290
(23%)

Office Workers
2 049 705
(79%)

Sales Service
Workers
3 388 415
(56%)

Figure 3. The workforce support and control of the system of professionals in Canada. Total numbers of workers and percentage of women workers are shown for each category. Following Marshall (1989), occupations are considered to be male-dominated where the

percentage of female workers falls below that in the total labour force (e.g., 45% for 1991). (Based on Statistics Canada, 1993 a, b, c) of establishing clear and enforceable boundaries around a body of esoteric knowledge that may either be claimed already by other professionals, or distributed for free by volunteers. Historically, a common tactic in such a situation is to build up professional reputation by discrediting voluntarism. The quest for autonomy has provided, and may still provide, just the mechanism to do that.

Quacks, Charlatans and Spinsters:
The Discriminatory Potential of the True Professional Ideal

If environmental educators can convince the rest of society that environmental education knowledge is complicated, risky, useful, and clearly and enforceably their own (environmental educators', not society's), then one last hurdle remains. They must demonstrate that they are competent stewards of that knowledge. But the demonstration of such competency has often been at the expense of others, as Johnson argued (1972):

> The core meaning of [professional] life is central to the work situation, and occupational skills are regarded as non-transferable—the property of a specific community. Charlatanism and quackery are, in this sense, a creation of professionalism and not the cause of it. That is to say that periods in which it is claimed that charlatanism is rife and needs to be stamped out are just those periods when an occupation is attempting to establish or struggling to maintain a monopolistic position. (p. 57)

Thus, *profession* acquires its meaning both by having specific traits, and also by having traits which some other word, such as *laity*, *client*, *semi-professional*, *patient*, *volunteer* or *amateur* can be shown to lack or misuse, that someone else was and is *not*-professional The extent to which we come to accept these relationships as commonsensical, natural, or normal is the extent to which inequality is legitimated.

Bearing in mind that professional educators depend on receiving a fee for educating others, then the successful professionalization of environmental education depends on the counter-marketing of the educational product of volunteers and

amateurs as inferior. At the same time, in pursuit of monopoly, where a limited membership shares the highest status and rewards, it would be reasonably self-interested to continue the existing hierarchical relationship of the professions and supporting occupations. Both of these goals can be accomplished through an emphasis on the importance of autonomy.

First, autonomy can be used to separate out the professionals—ideally self-employed, directing the scheduling and content of their work, and determining the standards necessary for competent and trustworthy practice—from the rest of the workers in the paid-labour force. This would include:

- *the semi-professions*: which lack autonomy in relation to either the client or the employer (e.g., occupational Health and Safety nurse);
- *the skilled occupations*: which lack autonomy and which depend on professionals for the theoretical grounding of their work (e.g., Geographic Information Systems technician);
- *the semi-skilled and unskilled occupations*: which lack autonomy and theory, and are essentially physical or manual in the practice of their work (e.g., Biophysical Inventory draftsperson, Site Rehabilitation/Remediation logger).

Second, autonomy can be used to differentiate between the professional (who has been trained and certified in ethical responsibilities to clients and colleagues) and the amateur/volunteer (who could be considered almost too autonomous, choosing to do what they do for neither state coercion nor market reward (Wuthnow, 1991).

Yet, as discussed earlier, the chief problem in the professionalization of educators has been their lack of autonomy. One other factor involved in this lack of autonomy has been gender, whether as cause (e.g., Etzioni, 1969) or consequence (e.g., Armstrong & Armstrong, 1992; Kinnear, 1995; Marshall, 1989; Sokoloff, 1992). That is, woman-dominated professions (e.g., teaching, nursing, social work) have been considered to be much less autonomous than man-dominated ones (e.g., law, medicine, engineering), to the point of being classed as semi-professions. One therefore has the somewhat confusing evidence that either a higher

percentage of the female than the male paid-labour force have been, and are professional (e.g., Bohnen, 1977; Statistics Canada, 1993 a, b and as outlined in Table 1 and Figures 2, 3), or that very few women have been truly professional. This lesser autonomy, while unquantified, has been attributed to women's individual pattern of psychological maturation, their biological or socialized identity, or to efficiencies of human capital usage through specialization. We would certainly find similar discrepancies (and similar rationalizations) in the representation within environmental education in particular, and the professions in general, of visible minorities, aboriginal peoples, and the disabled (Statistics Canada, 1995).

Will the professionalization of environmental education, in demonstrating a certified autonomy which both separates professionals from volunteers and amateurs, and professionals from semi-professionals and the rest of the paid-labour force, not merely serve to reinstate inequalities of access to environmental knowledge and decision-making? As a small example, consider that the definition of the environmental industries used by CCHREI and the federal government is such that the federal government could conclude that 90 percent of the workers in those industries were male (Ernst & Young, 1992). Yet, given women's participation in the paid-labour force, such a domination of environmental work by men is nonsensical (Mac Donald, 1995).

Conclusion: Do We Want What We're Asking For?

What all that boils down to is that environmental educators, in attempting to be considered more professional as, for example, in the proposal by CCHREI and IC, would focus on monopolistic control and autonomy and turn to professional exemplars such as medicine and the law. Faced with competition from other professions, with the weak professional standing of education, and with structural and other economic changes, will we be able to design a "professionalism" which both gains power and status, and keeps the deeper meanings of environmental education? Can we:

- *establish a unified body of general and systematized knowledge*: is action-oriented job-training the point of environmental

education? Should only people with the right education (see also the next point) contribute to the growth of this body of knowledge? In what ways would environmental educators be responsible for the interpretation, verification, and control of this professional knowledge, and for the integration into it of appropriate folk or common environmental knowledges?

- *require a long period of university-based specialized training, with certification and licencing*: would we model environmental education professional schools after medicine and law? Should university environmental education require a minimum of four degrees (baccalaureate in combined science/arts, baccalaureate in education, master's, and doctorate in environmental education). What balance do we strike amongst the combination of scholarly productivity, teaching, and community service, and how do we convince academics and administrators of our legitimacy (note: this remains an ongoing struggle for Women's Studies, where community ties, political change, and interdisciplinarity have been central since their origins in the 1970s).

- *clarify the unique social service, particularly its intellectual practice*: Environmental education is aimed at the establishment of a holistic and sustainable relationship between humanity and the biosphere. Have we reached agreement on the prerequisites for sustainable development, and the framework within which such prerequisites could be achieved? Can such a framework take into account the paramount importance of the fiduciary relationship between the professional and her/his clients? To what extent can we provide environmental education equitably and fairly?

- *control standards of entrance and exclusion, enforce a code of ethics, and verify the necessary level of autonomy*: do we need a global Association of Environmental Educators, with a system of licensing and certification, responsible for the surveillance of others to confirm that only environmental education professionals were practicing environmental education, and that people (both corporate and otherwise) were consulting them for expert advice on the environmental consequences of everyday life? Can we devise a single code of ethics, to clearly prioritize amongst environmental education professional responsibilities

to clients, colleagues, and employers, and assume that benefits trickle down to family, human interest groups, and other species?

The process of professionalization was not created by either CCHREI or IC, and, as representatives of industry in Canada, both are certainly working hard to bring order to a currently chaotic process. The certified environmental education professional, however, may be approved to meet existing goals of industry and government without questioning whether that is enough, or even best, in the long run.

Is this the kind of professional environmental education that we really want? In contrast, I close with a quote from Rachel Carson (who would probably not have made it through all of the above barriers):

> I really had not been waiting breathlessly for Mr. Shawn's [editor, *New Yorker* magazine] reaction [to the draft of her 1962 *Silent Spring*] yet once I had it I knew how very much it meant to me. [I went] into the study and played the Beethoven violin concerto—one of my favourites, you know. And suddenly the tension of four years was broken and I let the tears come. I think I let you see last summer what my deeper feelings are about this when I said I could never again listen happily to a thrush song if I had not done all I could. And last night the thoughts of all the birds and other creatures and all the loveliness that is in nature came to me with such a surge of deep happiness that now I had done what I could—I had been able to complete it—and now it had its own life . . . (Rachel Carson qtd. in Brooks, 1972; in Mac Donald, 1993; p. 108)

For me, Rachel Carson is an example of the true professional, committed to both the benefits and the costs of her special knowledge. She felt fully alive in this world because she had a passion for life on Earth—a reverence for the integrity of the species that coexist here, a fundamental sense of wonder about the robust fragility and interconnectedness of things. Rachel Carson's protection of other species was dependent on her loving knowledge of marine and terrestrial ecosystems, and on her ability to portray that loving relationship. Finally, Carson's passion displayed itself in a motivation to action, a desire to go beyond a reasonable expectation of duty. So, dying of cancer, she might have retired to her seaside home, hoping that someone more powerful would take

care of things. But she didn't and the world is a different place because of that.

Notes on Contributor

Marilyn Mac Donald is Assistant Professor of Women's Studies at Simon Fraser University. She has done research, taught, and published on the relationship between women and the environment, women and science/engineering/technology, women and the medical system, and feminist pedagogy in school systems. Marilyn is currently doing a survey of women, work, and the BC environmental movement and studies of female-friendly science teaching materials (including distance and computer assisted education).

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