

**Enhancing Geographic Education in Canadian Schools:
Comparative research on the role of interest groups.**

by

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*Dedicated to Major (ret.) Colin W.C. Boxall ; “XO” 420 Squadron – “Snowy Owls”.
Royal Navy Air Navigator. Meteorology Officer. Radio operator. Father.
My first geography teacher.
You instilled in a boy the sense of wonder for maps, travel and nature.
You keep alive in the man the desire to stay that boy.
I love you Dad.*

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Abstract

The development and creation, in 1993, of a Canadian Council for Geographic Education (CCGE) means that geographical education in Canada now has a national level association which seeks to enhance geographic education in schools. The CCGE is not unlike the Geographical Association in the United Kingdom (GA), the National Council for Geographic Education in the United States (NCGE), or the Australian Geography Teachers Association (AGTA) in that it seeks to strengthen geographic education in schools through the combination of a number of initiatives. This study seeks to determine what can be learned from those countries concerning the impact of curriculum change, geographic organisations, and the interplay between interest groups on the status of geography as a school subject. It makes the case that the most critical element or predictor of success for a geographic education association is the status, in a socio-political sense, of the school subject and discipline. Additionally, it is proposed that the extent of integration between disciplinary (or professional) associations and those associations focused on the school subject will determine status. Finally, the thesis includes a brief examination of how new technologies are affecting geographical associations in terms of status, integration and other activities.

List of Abbreviations

- AAG - Association of American Geographers
- AAS - Australian Academy of Science
- ACMLA - Association of Canadian Map Libraries and Archives
- AFSSSE Australian Federation of Societies for the Studies of Society and Environment
- AGI - Association for Geographic Information
- AGS - American Geographical Society
- AGTA - Australian Geography Teachers Association (Inc.)
- ANCG - Australian National Committee for Geography
- AP - Advanced Placement exams
- ASCD - Association for Supervision and Curriculum Development
- CAG - Canadian Association of Geographers
- CCGE - Canadian Council for Geographic Education
- CEEB - College Entrance Examination Board
- COBRIG - Council for British Geography
- DEETYA - Department of Education, Employment, Training and Youth, Australia
- ERA - Education Reform Act (UK, 1988)
- ESRI - Environmental Systems Research Institute (Inc.)
- GA - Geographical Association
- GDN - Geography Discipline Network
- GENIP - Geography Education National Implementation Project
- GIS - Geographic Information Systems
- IBG - Institute of British Geographers
- IGU - International Geographical Union
- LEA - Local Education Authorities
- NAS - National Academy of Sciences

NC - National Curriculum (UK)
NCGE - National Council for Geographic Education
NCSS - National Council for Social Studies, regional
NGS - National Geographic Society
NGSG - National Geography Support Group (sometimes NGS Program)
NRC - National Research Council (US)
NSF - National Science Foundation (US)
NSERC - Natural Sciences and Engineering Research Council (Canada)
NSTA - National Science Teachers Associations (US)
RCGS - Royal Canadian Geographical Society
RGS - Royal Geographical Society
RGS-IBG - Royal Geographical Society (with the Institute of British Geographers)
SOSE - Studies of Society and Environment
SSHRC - Social Sciences and Humanities Research Council (Canada)
UCGIS - University Consortium for Geographic Information Sciences
UK - United Kingdom
US - United States of America
USA - United States of America
USNC/IGU - United States National Committee for the International Geographical Union
WWW - World Wide Web

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INTRODUCTION AND METHODS

Introduction

Canada is one of the last English-speaking, industrial nations to have established a national level organisation that seeks to improve and speak for geographic education. Founded in 1993, the Canadian Council for Geographic Education (CCGE) is not unlike the Geographical Association in the United Kingdom (GA), the National Council for Geographic Education in the United States (NCGE), and the Australian Geography Teachers Association (AGTA). It is the primary purpose of this study to determine what Canadian geography teachers, academic geographers, and professional associations of geographers can learn from those other countries with regard to the impact of curriculum change, professional organisations, and interest groups on the future of geography as a school subject. Through such a determination, various specific actions and recommendations will be advanced in an effort to provide direction for future initiatives and organisational change for geographic education associations in Canada.

Several interrelated questions are posed in order to clarify and support the development of a 'best-fit-model' for Canadian geographical education organisations. Are professional geographers likely to be involved in the process of curriculum change? How successful is any involvement by professional geographers? Can Canadian geographers use the experiences of others in promoting geographic education in Canada? In addressing these questions, the paper reviews the circumstances of geography curriculum change in Australia, the United Kingdom, the United States of America, and Canada.

The thesis makes the case that status of a subject is the best indicator of the effectiveness of the associations promoting it. The status of geography, as a teachable subject in schools, is widely seen as being linked to public awareness of the subject's value and the support it receives in later programs such as those at post-secondary level. There are significant differences among the four educational jurisdictions in both the status of geographical education and the means or resources available to improve its position. In

studying these differences this thesis explores a critical status-enhancing factor: the extent of linkage between schools, academic and professional geographers, and geography associations. The notions of 'status', 'professional geographers', and 'geographic associations' shall be defined more clearly in a subsequent section.

Ivor Goodson (1983a, b, c; 1987, 1988a, b, c; 1990a, b, c; 1992a, b; 1993; 1995; 1996; and Goodson et al, 1984; 1990; 1994; 1995) has conducted extensive research in the areas of geographic education, the policy/curriculum making process, and school subjects. Important questions arise from his work, in general. What is the nature of a school subject? How do school subjects relate to academic disciplines? Who is involved in the development, promotion, defense, or status of school subjects? What are the relationships between various participants in the process? How do these actors come together in interest groups? How do such groups affect the process of enhancing a school subject? What are the best approaches towards enhancing school subjects and do such approaches depend upon the educational system? Is there a 'best method'? What elements of these approaches are found in Canada? Is there a means by which to apply a 'best method' approach to enhancing geographic education in Canada?

The thesis concludes with a brief exploration of the impact social and technological trends may be having on geography, through Geographic Information Systems [GIS] and the Internet. Two aspects of technologies such as GIS and the Internet provide a unique element of change impacting all four jurisdictions, and provides new reasons for associations to review how they can impact the status of geography. First, these technologies have the potential impact to be 'status symbols' in their own right. Second, the associations concerned with these technologies are quickly becoming significant actors in the enhancement of geographic education and the discipline. Often, however, they are developing along lines parallel to professional geography associations, at times subsuming their 'parent discipline'. These developments will be explored to see how GIS has become an important factor that should be considered in any generalized model for the promotion of geographical education.

Many organisations end within a generation or lifetime. In one manner, they are metaphors for our selves and our own lives. Professional societies, non-profit organisations, interest groups, and other such informal and formal gatherings of people are, in part, political entities. They usually have manifestos or goals and objectives, a mission, values, even guiding principles or a philosophy. They exist for a purpose – an objective to reach, or a system or belief to maintain. They also provide an opportunity for like-minded individuals to gather and discuss common issues, provide support, and combine limited resources. There are as many types of organisations as there are issues, concerns or beliefs. The following dissertation is concerned with organisations and specifically those that seek to promote, enhance, study and contribute to geographic education. The geographical associations central to this study are interest groups in the full sense of the term, and their level of success is a significant measure of the "sustainability of geography" (Slaymaker, 1993; Semple and Boxall; 1994). As we shall see, how well the various levels and types of associations integrate their activities and efforts plays a very significant role in determining such sustainability.

Methodology

Geography as a school subject and as an academic discipline has a long, rich and yet varied history from an international perspective (Boardman and McPartland, 1993 a, b, c, and d; Hill, 1989 and 1992; Marsden, 1980 and 1996; Naish, 1992; Sidaway, 1997). Research into its nature and history of geography as a discipline, as well as the nature of education and curriculum development, has been extensive and there is little need to cover these topics once more, much less a definition of the subject (Ball, 1971; Boardman and McPartland, 1993 a, b, c, d; Gardner, 1986; Graves, 1975 and 1981; Unwin, 1996; Wise, 1993). Many leading researchers have made the argument that the nature of academic disciplines is slightly different from that of school subjects (Ball, 1993; Bruner, 1960; Bruner, 1961; Downs, 1994; Gregg, 1994; Gritzner, 1990; Hulin, 1994; Naish, 1996b; Slater, 1994). Their research analyzed the epistemology and rationale for a discipline, such as geography, to education in general. Work of a comparative nature has

also examined geography's position as one of the social studies (Cox, 1976; Rice, 1980; Ross, 1997).

The present study reviews the literature relating to the subject as well as the history of the professional associations and societies which have sought to advance its status as a school subject. Its perspective, primarily historical, serves to establish a context for later analysis and comparison. As such, the study follows in the tradition of other solid geographic education research, such as Biddle (1976), Conolly (1995), Graves (1975, 1979, and 1981), Gregg & Leinhardt (1994), Haubrich, (1987), Mahony, (1988), Marsden, (1996), Stoltman, (1996), Walford & Haggett (1983), and Wise (1992). It is the hope of this author that this work will add to the call for an increased corpus of research to further the subject (Downs, 1994b).

Comparative analysis in the study has employed constructs used in special interest group research (see Atkinson and Coleman, 1992; Coleman and Skogstad, 1990; Pross, 1992). In doing so, it utilizes the methods of educational theorists who have studied the politics of interest groups in education (see Almond, 1990; Davey, 1996; Downey, 1988; Holmes, 1992; Godson, 1990c; Marsden, 1989; McAndrews, 1989), as well as political scientists who have contributed to an overall body of research related to interest groups (see Baumgartner, 1996; Berry, 1977; Coleman and Skogstad, 1990; Dowding, 1995; Jordan, 1990). There has also been substantive work, beyond that of Goodson, done in the field of interest group involvement in education (Faust, 1996; Monk, 1986; Natoli, 1988; Pattie 1989; Schuck, 1977; Weiss, 1983).

The choice of case studies is important to note. Geography, as a discipline and school subject, is practiced and studied in every nation in one form or another. Just as individual university departments or schools will focus on one research aspect of a discipline, rather than another, so too are there differences in the general approach to the subject and disciplines within whole nations. The four nations chosen are similar in that the origins of school geography in them are similar. All four nations have been heavily influenced by its development in the United Kingdom. This does not exclude influences from other

so-called 'schools of thought', such as from France or Germany, where geography has had a significant and yet varied history. The 'French school' has become known as the home of the regional approach, while the 'German school' has given rise to geo-political approaches. Debates about the nature of geography and the problematic focus on physical versus human features, as well as integrative viewpoints, are not at issue here. Moreover, each of the four nations was chosen for reasons of common language and relatively similar disciplinary 'roots'. Interestingly, a very significant migration of geographers from the United Kingdom to Canada, Australia, and the United States (as well as among those nations) has helped to give rise to the discipline as taught within universities and schools. There has also been a long history of curricular influences between these nations in terms of shared textbooks, atlases, maps and scholarly communication. These four nations are dissimilar in terms of politics and the organization of education in administrative terms. However, the structure of various geographic associations in each of these nations has taken on very similar features. Most noticeably, all four nations, as we shall see, have developed some means of regional or local representation within the context of larger, national associations.

Additionally, the exclusion of other English-speaking nations where geographic education associations exist is due solely to those nations, such as New Zealand and Ireland, not having established the types of high-level or peak organizations that have been developed in the cases under review. These 'peak organisations' are critical elements within the 'best-practice' model presented. While they do exist in non-English speaking nations, a research decision was made to focus on one language group in which there are similar historical contexts for the development of geography as a school subject and discipline. Such an approach follows, in part, the methods and analyses of Goodson and others (see for example: Goodson, 1987; 1988a, b, c; 1990a, b, c; 1992a, b; 1993; 1995; and Hill, 1989 & 1992; Marsden, 1980 & 1996; and Naish, 1992).

Terminology

Certain words used throughout this study have specific meaning related to the context of the thesis and may be different from their usual meaning. For example, the term 'teacher' identifies those within the primary and secondary educational settings. Teachers may be, and often are, actively involved in the development of curricula. However, in this discussion, the central concern is to see how interest groups are involved in the process of curriculum change in geographic education at the primary and secondary levels. Therefore, studies of classroom activities, while significant and important in and of themselves, are not focused upon and so only some of the many functions teachers is involved.

Professional geographers are defined here as those who work in, research, or teach geography and geography teachers at the post-secondary level. This definition also includes those geographers employed in business and the applied fields of geography, such as those in government laboratories and agencies. In this paper, membership in professional associations is question of vital concern, for it is through those associations that most professional geographers have influence over geographic education. This is not to exclude the valuable work of individual geographers in or outside associations; much positive influence is exerted in anonymity. There have been situations whereby the work of key individuals has 'carried the day' in the process of changing the actions of associations seeking to enhance geography's position or status. However, such persons of energy and vision exist as much in Canada as elsewhere. The success of key individuals in, for example the United States, is explained more by the pre-existing support for their individual actions. This thesis, by focusing on the efforts of associations and those pre-existing conditions for support, lends credence to the idea that with properly funded and structured organisations, individual efforts and ideas can flourish and be given adequate support to achieve success. The reasons for this should become clear as the influence of geographic associations on geographic education in general, and curriculum in particular, is discussed.

If curriculum is a value-laden term, so too is the notion of curriculum change: the concept of 'change' implies a focus on a process and not an outcome. Even so, it is accepted that a significant and important outcome of curriculum change is in fact a prescribed curriculum, or supportive materials and concepts surrounding a program of study. Outcomes are not under review in this thesis. What is reviewed and analysed are the ways in which geographic associations cause or influence change as a process. The outcome of central importance to this study, therefore, is not the geography curriculum, but the change in status and support for geography within schools. Research into interest groups and curriculum change thus provides the basis for analyzing developments in each of the four jurisdictions. From that, an operational framework is presented for proposing 'best practices' of geographers and geography educators who seek to enhance the status and place of geography. A more detailed discussion of the idea of 'curriculum change' and its relation to the 'status' of geography is contained in a subsequent chapter.

INTEREST GROUPS

Interest Groups and Curriculum Change

Concern over, and debates about, education are not new. Writers on education in more recent times have increasingly focused on the socio-political context so that, like health care, it has been placed at the forefront of the public agenda (Barrow, 1984; Emberley and Newell, 1994; Ravitch, 1988). In some cases the politics of the agenda has been more 'left-wing' (Barlow and Robertson, 1994), with a call for more integrated and new critical studies on issues relating to social, economic, and environmental problems. Often these types of critiques of the status quo include the need to disassociate education from training or other utilitarian approaches. On the other hand, others have suggested a more conservative call for 'back-to-basics education' (Hirsch, 1988). Such approaches have, as in the case of Hirsch, gone so far as to suggest that there can be a list of ideas and concepts that, once learned and known, will ensure a more than adequate educated person will follow.

Both extremes of the socio-political agenda play a role in determining the nature of the curriculum as well as the way curriculum is changed. Both extremes should be of concern for geographers seeking to enhance the status and place of geographic education. One approach can have a negative outcome for geography by subsuming the school subject within more generalist approaches - something that has happened often with regard to social studies in schools. The other approach could mean a return to 'capes and bays' geography; an obvious negative outcome for geographers who have sought for decades to rid the discipline of such a description. What is interesting to note is that both viewpoints, as well as those throughout the remainder of the spectrum, have interest groups associated with any of the particular political perspectives.

Curriculum, in the classical sense in education, is only partly about curriculum; it is also about politics, perception, status and power. It used to be, and still is to some extent, that curriculum was 'controlled' by educational bureaucracies and the individual local boards/trustees and teachers. Teachers' unions and societies, or professional educational associations did not become influential until after the Second World War and in

conjunction with the increased respectability of educational theory and the growth in research and students coming out of faculties of education. At the same time that sociological and psychological theory began to be accepted as having considerable application to schooling, there was a rise in the structural organisation of such 'educational' and 'professional' interests. This process of organisational development occurred in a large number of professions (Ball, 1993; Zald, 1987; Walker, 1991).

It is important to understand the impact competing agencies have on the adoption of curriculum. What is to some extent a compromise arises out of political struggle and, in other cases, political domination (Barrow, 1984, 26). In the context of this thesis, Barrow's notions beg one to ask if *professional geographers* seek, in the political process of curriculum change, a sort of "domination" of the process (Berry, 1977), and to a lesser degree do they seek any substantive involvement at all. It is apparent that academic disciplines began to develop mandates that focused more on curriculum change without dominating the process (Goodson and Anstead, 1994). It became the view – and it is still holding sway today - that one of the most effective means of influencing or promoting a discipline per se, such as geography, was to be an active player in the process of curriculum change in the schools (Gerber and Lidstone, 1996, p.4). It is within such educational settings, and within the educational bureaucracies, that if and when a discipline may be taught is determined. How 'actors' in this political process become active in the most effective way is therefore a key question for consideration (Naish, 1996, pp. 63-64).

Curriculum change in geographic education is not only the development of new curricula, but also the *enhancement* or *adaptation* of geography as a school subject, and the overall *promotion* of the study of geography within the pre-collegiate school system. These are strongly interrelated aspects of change that can be thought of as forming a 'climate of change'. How well professional geographic associations and geography education associations 'defend' or 'promote' the study and teaching of geography is one of the best ways to determine the effectiveness of geographers and geography teachers in 'changing' geography curricula. Therefore, the notions of 'change' and 'influence' might be used

concomitantly, and in this context the enhancement and promotion of geography are two key elements for associations to pursue under such change and influence. Such change or influence is a critical element of the 'status' of geographic education, for if directed in a positive manner (as shall be shown by the case studies), increases in status can mean the development of a more sustainable position for geography in schools. Sustainability, therefore, can be equated with geography curriculums that have had their place secured within the overall educational program.

There are obvious political implications to be taken into account between school subjects and the process of curriculum change. It may not be appropriate to think of this in avant-garde terms, but this idea of change and influence is based upon a rather modern managerial concept - the notion of *change agents*. A change agent is one individual or a group that acts as a catalyst in the process of change. The emphasis, therefore, need not be on the actual change or outcome (exams, syllabuses, texts, etc.) of curriculum change; rather the focus can be on the process and players who create and continue such catalytic functions. The role and function of individuals and associations in developing the required status to support the inclusion of a subject within the school curriculum is an important consideration to keep in mind throughout this thesis (Goodson, 1993, 25-26 and 190-192). As stated previously, there are individuals who have affected great change in geographic education. Their work, energy and commitment are not questioned. However, as will become clearer through an examination of the various case studies, the more critical factor determining successful geographic education initiatives is the pre-existing and on-going strength and supports for associations.

Looking beyond 'physical' changes, to what David Lambert refers to as the "context of a broad cultural analysis", allows for a reflective approach. This means that actual change in course syllabi becomes less significant than the overall context or climate of change (Lambert, 1994, p.65). In part, this refers to factors that allow change to take place and even to what climate exists. Curriculum change in geography, or for that matter any discipline, can result in several outcomes. These outcomes may be negative, in that geography is taught less frequently or with less vigour. Conversely, the outcomes may be

positive, whereby geography gains a more secure and respected place in the curriculum, and where geography is taught in a manner that more accurately reflects the nature of the discipline.

Gross and Dynneson (1983) have suggested that curriculum change occurs in three ways: imposed, derived, and jointly planned. Imposed comes from outside agencies or groups. Derived comes from the local school or teacher level. Jointly planned can be a mix, but usually takes the form of teachers sitting on curriculum committees with input from higher levels (those who would have imposed) and lower levels (those who would derive or implement curriculum) (Gross and Dynneson, 1983, 45-47). Many examples discussed in this paper will illustrate these ways in which curriculum change can take place. At this point, however, it should be noted that professional associations in most nations have been involved in curricular change in all three manners above - often with the direct involvement of professional geographers and geography teachers. We have now moved through to a period, in most nations, where change occurs via the jointly planned method, with the joint efforts coming from teachers, professional geographers, and educational authorities, and at times including the general public. This is neither good nor bad; such judgements are left to other discussions. However, the overall trend does seem to be towards processes of change which are inherently more democratic.

As we shall see with the examples of the United States, the United Kingdom, and Australia the geography curricula practised (if at all) in various jurisdictions and at various levels were seen by many professional geographers to be inadequate, weak, poorly supported, and in need of a 'transfusion' of support from professional geographers. That being said, the author recognises that some academic geographers, and even whole departments, have achieved success and status without being involved with school geography. There may even be cases where academic geographers might vocalize a strong distaste for any such 'non-academic' issues or pursuits. However, it remains true that curriculum does not develop in a vacuum; nor is it implemented in isolation. Curriculum change is a process that involves people and time. People (in this case, professional geographers and geography teachers) review and reflect upon the content

and the practice of curriculum. If concerns exist, then the political process of change comes into play and it is the manner in which this politics is played out which underlies this discussion.

Politics, whether in an educational setting or in the field of party politics, has a significant core related to policy. For this thesis, a connection is made between the concepts of policy and curriculum. In strict political terms, policy is the final expression of political action and reaction. Curriculum is the final outcome of action and reaction related to educational programs of study. Again, the study herein is focused on the policy process that can, and does, ensure sustainable geographic education programs exist in schools. According to Coleman and Skogstad (1990), *policy communities* form around particular policy areas and include all the potential actors in that policy realm (p.25). These communities subdivide to include *policy networks* that relate to particular questions or issues or sub-concerns. They also subdivide into what Pross calls the "sub-government" and the "attentive public" (Pross, 1992) – closely allied groups that act with educational administrations are sub-government, while interest groups tend to be associated with the 'attentive public'. In terms of the Canadian geographic education, the professional and academic geographers and geography educators have the potential to form policy networks related to the 'policy area' of geographic education in schools and post-secondary education.

The actual policy questions associated with geographic education is what the policy networks have formed around. As we shall see, the degree of organisation within and between policy networks is the most critical determinant of the success of efforts by geographic education interest groups seeking curriculum change (as defined above as the enhancement, promotion, and overall development of a sustainable place for geography within school programs). In this case it makes sense to focus on the actors involved in the policy question of the vitality of geography as a school subject. This means that the 'actors' include government departments and agencies, geographers in business and academia, geography educationalists (within education schools), and geography teachers. The actors in individual networks coalesce into interest groups. That coalescence– how

they interact and perform – will shed light on the nature of building status for geographic education and provide useful insights for educational jurisdictions wishing to emulate such success.

Coleman and Skogstad (1990,29) suggest that “different types of policy networks may exist within the same policy community.” Interestingly some geography associations or societies (such as the National Geographic Society) can be viewed as private companies as much as they can be viewed academic societies pursuing a common good. This is problematic because the largest funds available to be provided to the educational and non-profit geography associations – and the policy networks - tend to come from those same corporate geography ‘societies’. A closer relationship between educational agencies and private sector players in the geography education policy networks has had the effect of marginalizing other geography interest groups to the role of advocates. This also has meant that defining the roles and types of interests has become confusing and problematic. In order to more fully prepare for this, and to affect pressure upon government and non-government agencies alike, the private sector has reorganised its interest group presence to create a more effective and efficient system of policy participation. In fact, as we shall quickly see, the situation has become one of concerted effort to establish highly visible and permanent bodies that link directly to the educational establishment, thereby forming new policy networks.

According to Coleman and Skogstad, the ability to present views representing a variety of differing interests is a key feature of a strong association (1990, p.23). They refer to policy networks as being either highly integrated or not (26). However, within a policy network, some associations clearly have advantage by virtue of their date of founding, as well as their reputation. This explains why some actors have been invited to put forward views to the educational authorities, while others often associated with public interest groups with single issues, are relegated to observer status. This is significant for the Canadian situation because the associations with the potential to form the most integrated networks are very young. Combined with a lack of solid funding or a significant number of members, one can readily see that there is a greater chance Canadian geographic

associations will need to overcome the 'observer status' issue while attempting to form more flexible and integrated networks.

It cannot be overstated, however, that the organisational system of interest is highly fluid and affected by factors outside the control of all parties. Diminishing government budgetary resources means the private sector is becoming responsible for the building of schools. Demographics and rapidly changing professions mean more people 'switch' careers or take 'early retirements', thereby decreasing the number of potential supporters within the policy network. Changes in technology, globalisation, and an exponential growth in the use of the internet, mean very few groups or agencies can be expected to control or predict trends, or to maintain loyalty for very long. Such externalities are having a direct impact on all professional associations. Some networks, as we shall see in the case studies, have accepted such external pressures and have begun to alter their organisations and activities to meet such challenges. In the Canadian case, the lack of a highly integrated network means there is no existing forum for dealing with these external forces affecting networks.

Pross (1992) provides a full and ample discussion of how interest groups form, and what it is they try to do, and the pressures affecting change within such groups. For example, one aspect of the 'internet' is that groups can form overnight through the development of electronic discussion groups and www pages. These are, however, transitory. This does not mean that such vehicles of interest group communications and expression are invalid, on the contrary. However, if one takes the view of those receiving input from interest groups (in this case both government and the private sector), then the legitimacy of the group becomes an important feature, and interest groups must avail themselves of any and all new tools, such as the Internet, that can help get their message out. In the end, the most important conclusion that can be drawn from the research into interest groups and curriculum change is that professional and educational associations are key players in the change process - whether that be considered advocacy or enhancement or promotional activities.

For the purposes of this study, the key concept drawn from interest group research relates to the development of peak level organisations - those bodies that are highly integrated and that represent the broadest community of supporters focused on one network, in this case school geography. Peak organisations are actually an amalgam of a variety of smaller, but equally focused, associations. Normally, such associations have existed (or continue to) in their own right. Peak organisations develop when a number of associations join to link resources and efforts (money, staff, or other resources) in order to have a larger or quicker impact upon a particular policy issue(s). It is the contention herein that those nations that have developed effective peak organisations focused on geographic education have become regions where the status and place of geography as a school subject is more likely (or in actual fact) to be secured and made sustainable.

Related to the idea of peak organisation development are the concepts, used herein, of horizontal and vertical integration of associations. Horizontal integration is not interdisciplinary per se, rather it is a level of collaboration and more formalized cooperation within a policy network (i.e., geography) or inter-association cooperation. Horizontal integration occurs when a number of associations agree, usually through some formal mechanism such as a cooperative agreement or memorandum of understanding (MOU), to cooperate and share resources towards a common set of goals or policy outcomes. Such outcomes could be specific projects, such as a scholarship or competition (like a 'best paper award'). However, it should be noted that a large number of professional and non-professional societies and associations carry out such activities on their own. Even so, the development of horizontally integrated groups and their resulting activities are often carried out because of efficiencies gained through economies of scale, as well as the added visibility and status that can be attained through larger organisations that have a broader membership base and more members and resources to draw upon.

Conversely, vertical integration is characterized by intra-association actions and membership. Vertical integration is often characterized by associations in a narrow field that are subdivided into local or regional groups. Sometimes such divisions within a vertically integrated association include subdivisions based upon themes or topics related to a specific area of interest. An example of this might be an academic society that has a national office that also includes regional and thematic groups. The Association of American Geographers (AAG) is a prime example of a highly integrated association along the vertical axis because it represents a fairly narrow set of interests (academic and professional geographers), and yet it has regional divisions that meet and carry out local activities (meetings) as well as thematic groups based upon disciplinary subdivisions (geomorphology, feminist geography, information technology). An example of horizontal integration is the US Committee on Geography under the auspices of the National Academy of Science. That committee represents a broader community of geographers, such as those in schools, business and government. It also represents the horizontal axis because membership is partly based upon associations so that 'seats' on the committee become reserved for representatives of associations that, in most cases, are vertically integrated.

In this study, the cases are reviewed in terms of their integration on both the horizontal and vertical axes. In fact, through the effective combination of vertical and horizontal associations, many of these cases have developed very effective peak organisations. Therefore, for the purposes of this study, the development and enhancement of the status of geography as a school subject is measured against the existence and organisation of highly integrated peak organisations that are focused upon the policy issues related to geographic education in schools. Such peak organisations are also analysed in terms of how effective such a focus on geography's place in schools is translated into concrete actions and opportunities to both support and affect change related to the 'political' change process as outlined above. With this in mind, this study now turns to a brief review of the research related to curriculum change.

CURRICULUM CHANGE

Curriculum Change and Geography

The previous chapter set out the role that interest group research plays in explaining or defining the functions of associations and organisations in general. It creates a strong basis upon which to review individual associations or the collaborative networks and the interplay or cooperation within them. Clearly then, the various geographic education associations can and should be viewed as *interest groups* as well as part of a larger policy community, namely that of education. It is the policy networks that develop around issues related to geographic education which are the focus of this chapter.

Goodson contends (Goodson, 1983b; 1983c; 1988a; 1990b; 1993; and Goodson and Medway, 1990) that interest groups become involved in curriculum change in order to put forward several overt and hidden agendas. Sometimes these are simply to bring forward new school subjects, such as environmental studies (Goodson, 1983a; 1995a; 1996). They are accompanied by significant external or macro-pressures, as in the case of rationales that are less academic and often more moralistic (religious education being a prime example). Goodson (1996, p. 83) continues to argue, using subjects other than geography as examples, that there are also 'micro-political pressures' at play. Internal school teaching and administrative decisions (such as the amount of hours each course has in the timetable, or who teaches what subject) are as significant factors as external pressures in determining the sustainability of the school subject. However, the ability to gather resources and attain status ultimately determines whether a subject will be taught or viewed as important enough to be added to the school calendar. The end result of such micro and macro pressures and perceptions will be seen in whether or not students enroll in the subject class.

Battles for control and influence often occur along disciplinary and/or philosophical lines (Goodson, 1983b; 1987; 1988a; 1995a). The study of the history, politics and structure of curricular change and the nature of curriculum is obviously important. A more narrow

focus on the specific interactions between professional geographers (and their associations) and school geography teachers and the school subject of geography, using Goodson's premises, provides an additional basis for understanding the dynamics of geographic education enhancement and sustainability. "To understand the progression along the route to academic status", Goodson writes, " it is necessary to examine the social histories of school subjects and to analyze the strategies employed in their construction and promotion (Goodson, 1988c,164)."

Goodson clearly argues that the teaching of a specific discipline is directly related to the history, sociology, and politics of that discipline. Moreover, it is related to the direct involvement of individuals who align themselves with that discipline, as well as the professional associations who (individually and/or collectively) participate in the process of curriculum change. "The association increasingly acts to unify sub-groups into a dominant coalition promoting academic status (Goodson, 1983b, p. 391)." Again, there is a clear connection between the above and the notion of policy networks outlined in the previous chapter - in fact, the terms "coalition" and "sub-groups" are found throughout the interest group literature. Attaining status allows for resources to be transferred to a subject so that it can increase its presence and support inside the curriculum of schools. The perception by others outside the disciplinary 'walls' of the school subject's credibility will then mean that status will be either maintained or enhanced. This, in Goodson's view, is the ultimate determinant of sustainability for a school subject (Goodson, 1993, pp.30-34).

The centrality of status is further highlighted in a later publication by Goodson and Anstead (1994):

Subject status essentially represents the collective professional status of subject teachers. Its material side may consist of remuneration in cases where teachers in different departments receive different salaries. It can also cover career prospects, which may increase, for instance, when a subject earns departmental status. The material capital of a subject also consists of the collective resources, in terms of buildings,

classrooms and equipment, which determine the working conditions for subject teachers. The symbolic side of subject status includes the authority or respect accorded to the subject, as well as the extent to which it controls access to a form of knowledge deemed valuable. This knowledge can be described in terms of cultural capital or credentials; its value reflects the degree of desirability of the opportunities for future prospect opened to the subject's students (Goodson and Anstead, 1994, p. 83).

Notions of "material" and "symbolic capital" (authority and respect) may also be very critical in determining the vitality of the discipline. Instead, the interface between the status of geographic education and that of geography is itself one where associations should be most involved, if their interest is in the status of the subject and discipline. Therefore it is very important to examine the "capital" which associations can bring to bear in this status-seeking, policy networking process. Goodson continually relates the history of disciplines (see Goodson, 1993, pp. 57-83), and the conflicts between disciplines, to the level of support for those subjects in schools and the degree to which the curriculum is able to be influenced by groups outside the school. "To view subjects as 'no more than socio-historical constructs of a particular time', whilst correct at one level, hardly serves to clarify the part played by those groups involved in their continuance and promotion over time (Goodson, 1988c, p. 163)".

In one sense, this concept of status, gained through change and organised group involvement, can be measured by a simple process. For example, the final authority for the curriculum taught rests within the educational system, either at the school level or in some other official body (like a department of education). The degree to which this authority can be influenced, through consultation or direct employment, will often be determined by the 'status' of those within the discipline who seek to have input on how 'their' subject is represented in the curriculum. Subject groups or associations can play an extremely important consultative role in contributing 'expert' advice.

If a final authority does not see an active, vigorous, or healthy discipline, as measured by publications, conferences, committees, membership, and publicity, to name a few, it is much less likely to allow those with a concern for the subject to have influence over curriculum change. Additionally, Goodson's research is germane to this study because of his continual focus on geography as an example of the nature of curriculum change. It would follow, therefore, that the most vigorous geography school programs should be found in the places where there are the most influential status-builders. "Plainly the drive towards higher status is accompanied by opportunities to command larger finance and resources (Goodson, 1988, p.179)." It is interesting to note that at the time of this writing the Geographical Association (GA) just surpassed 11,000 members. Such a significant number - larger than the AAG and CAG combined - means that there is a large potential source of resources to bring to bear for the purpose of enhancing the subject's status, or at least increasing its status capital. In other words, "the close connection between academic status and resources is a fundamental feature of our educational systems (Goodson, 1988c, p. 179)".

Goodson, (1988a, pp. 31-33) highlights the role of university scholars in defining the subject through disciplinary studies and arguing for more resources. However, he fails to see that today the university and the schoolteacher are cooperatively defining the subject and determining its status through associations and organisations. Goodson also points out that *curriculum* is not the same as discipline or subject. He suggests that it is the politicizing of curriculum in times of limited resources, and the need to institutionalize and legitimize a subject, that can determine the nature of curriculum. In discussing the development of European studies in the UK, Goodson highlights these issues and the need for a dialogue between the two levels of education as a means that can affect status and eventual subject acceptance and sustainability.

Without the prospect of any general definition and legitimization of a new subject at university level, the new contender for subject status is left fighting a series of encapsulated battles within individual schools. the micropolitical issues and perceptions..... serve to ensure the initiative is not sustained over

time. With no prospects of broadening the base beyond individual school definitions or isolated examination courses teachers draw negative conclusions about the subject's viability and its career-enhancing potential. A micropolitical war of attrition leads to subsequent defeat for the new contender (Goodson, 1988b, p.158).

The work of Goodson and others, like the research related to interest groups, provides useful concepts by which to review the nature of school subject development and curriculum change. Specifically, it provides a clear conclusion about the central role of interest groups or professional associations in that change and in the process of status building. Furthermore, it shows that it is the status - even the perception of status - that in the end allows school subjects to thrive. The case of geography is no different, as Goodson has shown in his review of the development of geography as a school subject. From the convergence of these two research areas come the critical concepts of status and policy networks that are central to determining the level of activity and the success of that activity in enhancing geographic education. These concepts are merged in the present study into the notion of integration - which is further subdivided into horizontal and vertical integration. The predictor of success for geographic education organisations will be the integration of activities with other associations as well as the integration within the association. This is measured by the success of geography education programs and the level of status, as well as the actual cross association opportunities for cooperation that exist. As we shall see with the four examples under study, there are differences are possible in the level of integration and practice. Also, there are various levels of success in terms of outcomes such as status, resources, curriculum change and overall public perception of the school subject.

The literature of the four nations under study points to one significant feature: there is a wealth of information available on the development of geography as a discipline, and on geographic education in general and in specific national contexts. What is less evident, or most often less specified, is the description or historiography of how various associations (or individual geographers) have come to involve themselves in geographic education, much of which can be inferred from reading 'between the lines'. An example

of this may be seen in the amount of supportive materials produced for geographic education. This has traditionally taken the form of textbook writing and production by geographers to support specific programs in geography classrooms. Much work, however, has occurred in relation to the development of supplementary materials, workbooks, short texts, curriculum guides, pamphlets and the like. Some associations have even been publishing curriculum guides and conference proceedings for use by classroom teachers; most notably, the Australian Geography Teachers Association book *'Teaching Geography for a Better World'* (Fien and Gerber, 1986) which not only sold well in Australia, but also became a well circulated text in other parts of the World.

In the nineteenth and early twentieth centuries, much of the material available to the classroom teacher of geography was found in a single text written (usually) by an academic geographer. More texts and other materials are being written today by professional geographers, practicing teachers or others with an interest or proficiency in some aspect related to geographical inquiry. The Geographical Association in Great Britain, for example, produces a large number of texts and other materials that support the classroom teacher. This is also a revenue-generating exercise. The situation is similar in the United States and Australia. Most of the items which support the curriculum are produced in cooperation or consultation with teachers and professional geographers, and often with the support of departments of education (governmental and university based) or similar authorities. A different situation pertains to Canada where there have been a few instances when geographers created materials for classroom usage, but those have often lacked the tacit support of others associations, so the ability for such work to enhance the status of those associations is diminished.

With the above remarks by way of introduction, the study now turns to review the situation in each of the nations. The situation of geographic education in the UK, Australia, the US, and Canada will be compared to see commonalties in approach by professional associations, as well as common outcomes in the improvement of geographic education. The first example is that of the United Kingdom (UK).

THE CASE OF THE UNITED KINGDOM

Overview, The oldest geographic education associations.

Geographic education in the United Kingdom developed before the academic discipline was recognized or established in the universities. The Geographical Association (GA), the largest and oldest geographic education association in the world, was established in 1893, seventeen years before the first university department was established at Oxford (Boardman and McPartland, 1993a). However, geographers at the outset realized that the academic discipline was dependent upon the status of the school subject, and the school subject in turn would always be in danger of losing a place in the curriculum if the academic discipline was less firmly established (Goodson 1984, pp. 166-167).

The Royal Geographical Society (RGS) had been established in 1831 but did not concern itself with education or curriculum per se; rather, its mandate was focused on developing a broader, societal acceptance of geography as a valuable means to explore, discover, catalogue/describe and colonize. This was very much in keeping with the British "empire building" viewpoint that lasted until the end of the First World War. The RGS did, however, contribute to the rise of geography in schools and universities. In 1886, it commissioned a report from J. Scott Keltie, who happened later to be appointed inspector for geography in the schools (Marsden, 1989; Walford, 1993). Keltie's report highlighted the need to train teachers in the methods of geography and to enliven the school subject with more research and teaching (as well as teacher training) at university levels (see Boardman and McPartland, 1993a; Wise, 1993).

By 1914 the membership of the GA was 1,000, while that of the RGS was 5,000 (Marsden, 1989, p. 203). Marsden concludes that the RGS had gained status for geographic education at all levels by strategically using its resources and political influence. That influence, in part, was due to the RGS being an exploration and discovery association - an 'old boys group' whereby imperial views could gain public profile, be justified, and later taught in school: a political justification for geography in schools (Marsden, 1989, p. 509). After the empire collapsed after the Second World War, the RGS and GA found that their reason for being had changed.

Education had moved into a progressive and theoretical period, and so geography had to shed the clothes of its foundational period and become a more academically solid, and educationally justified school subject and academic discipline (Marsden, 1997, p. 241). This led, in part, to the quantitative revolution experienced by geography between the 1950s and 1970s and, arising from the 'Madingley lectures' in 1963, a refocused effort on the part of the GA (Boardman and McPartland, 1993a, b; and Marsden, 1989; Rawling, 1996; Wise, 1993). The Madingley lectures had been more akin to workshops where geographers 'passed-on' new ideas and methods to teachers.

Ashely Kent has suggested that geography had, during the post-Madingley years, a slight image problem, and that increased communication between geographers and teachers, with a focus on professional development, would do much to help (Kent, 1987, pp. 297-301). But these efforts to raise the status of the subject and the discipline in schools and universities did not begin until the post-war years and their roots went back to the geographers employed at the first department established at Oxford University (Marsden, 1997, p. 245). Later on, teachers would become 'teachers first' and geographers second. Ironically, around the same time the title of the journal of the GA was changed from the *Geography Teacher* to *Geography*, which may have indicated a desire to reach a level of status among the professional geographers in light of the aforementioned changes in the nature of the discipline.

It was around this time that the Institute of British Geographers (IBG) was formed. At the outset it was designed not to compete with the GA, but to be complementary. Academic and professional geographers from the IBG helped with creating new texts and supportive materials and conducting in-service programs - even though they no longer had direct influence or control over setting the high school leaving exams or syllabus. Of critical importance was that the IBG eventually merged with the RGS (in the mid 1990's) to form a single association (although maintaining both names for the present time). The RGS-IBG organisation still carries with it a heavy emphasis on research and exploration but, as we shall see later, the RGS-IBG has found new ways to support school based geography.

The political elements of UK education leading to the National Curriculum.

Marsden (1986; 1989; 1996) and Goodson (1988c; 1993) provide an extensive review of the development of geographic education in England from a political perspective.

Marsden, one of the most prolific writers British writes on the subject, focused his research especially on the period leading up to the later part of the twentieth century and the role of the RGS in the founding of geography in both schools and higher education (Marsden, 1986, p. 513 and 518; see also Stoddard, 1986). He has noted that “[G]eography and history were subjects at the cutting edge of the process of politicizing curriculum content, and their position as school subjects was in part justified in these terms (Marsden, 1986, p. 509)”.

It is not the purpose herein to expand or describe upon the historical accounts of those periods in terms of the broad social or educational philosophies and theories that may have influenced geographic education. It is, however, noted that there was a period in the 1960's and 1970's whereby the practice and research within the academic and applied sectors of geography (the universities, research centers, businesses, governments) had a tremendous impact on how geography was carried out in the schools. The discipline 'generally' moved from an encyclopedic, descriptive period, when humanistic and regional studies dominated the subject, to a period of quantification, theorizing and model building.

Often it seems geography and geographers reacted to themselves as much as to the overall trends within research. With the advent of more accessible computers for research on university campuses in the 1960's and 1970s – and perhaps with a continued influence by the space programs and 'sputnik-moon shoot' syndromes - there was a brief time when everyone felt it critical to quantify all possible ideas. This had a direct trickle down impact on the schools. In the UK, for example, the decades between 1970 and 1990 were periods of major change in both the educational landscape and in the way geography, as an academic and applied discipline was practiced (Boardman and

McPartland; 1993 b, c; Marsden; 1996; Rawling, 1996). The changes had the effect of increasing the perception that geography was a serious subject. From that time onward there were numerous curriculum projects and much emphasis on content, theory and skills.

The above period of renewed emphasis on geography had an impact on schools teaching geography, and on the inclusion of geography in broader discussions relating to a UK national curriculum. In 1989, then President of the GA, Michael Storm (a 'schools inspector') suggested that the subject was increasingly seen as vital, and public acceptance of that vitality was important to maintain. Growing numbers of students writing geography exams for 'high school completion (GSCE – General Certificate of Secondary Education)' indicated a place or status associated with the school subject. Besides exhortations about its value and history, geography regained its status to a level sufficient enough to be considered a foundation subject within a national curriculum. As Storm saw it, there were factors at play in that resurgence, such as: subjects being viewed as traditional have a cache; geography is known to be unique and to have a unique perspective to offer; and society as a whole sees a need for more foundation subjects (the utilitarian argument). Moreover, he saw the repositioning of geography as "a foundation subject as owing something to the persistent and arduous activities of this Association over the years, particularly from 1985 (Storm, 1989, pp. 293-294)."

In the case of the UK, the fact that publishing and communications within geographic associations had a very strong tradition meant that associations could rally members to support such 'arduous activities' as Storm suggests above. In the UK, as in Australia and the United States, the fact that the leading association for geography teaching and geography as a school subject had its own publication meant that material, advice, calls to action, and promotional information could be distributed easily. Beyond this, one can imagine that in schools and libraries across the UK, copies of the journal *Geography* and the *Geography Teacher*, would be available for viewing by all teachers and administrators. The power of a substantive and professional looking ("glossy") journal to create a perception that the subject is both valuable, stable, supported and strong. Recent

changes in the nature of scholarly communication and the impact of the Internet on publishing and professional literature do not negate this factor. They do mean is that associations must now be seen to be on the Internet and able to take advantage of leading-edge technology. All the associations in the UK have Internet presence via the World Wide Web, and this technology is used to distribute information and raise the public profile of the associations. It should also be noted that, in terms of geographic education publications, the UK has also exhibited growth and change, such as through the development of the *Journal of Geography in Higher Education*, a publication focused on applying educational methods of geographic education to the higher education field.

The 'reality' of geographic education in the UK is more one of fragmentation and regional differences. Control for education, in general terms, is a national-level responsibility and governmental power. The UK was, until very recently, a unitary state, which meant that overall coordination and direction for educational matters occurred at a national level. Scotland has always exerted control over its own educational system, although there is awareness in Scotland that many students continuing studies beyond high school need common experiences and exposure to similar curricula as students in other parts of the UK. Now that Scotland has regained a parliamentary government of its own, the situation could be characterized as 'fluid'. This is also true for Wales where a Welsh Assembly has been established and educational matters turned over to a Welsh Board of Education. Such changes in political jurisdictions have impacts on associations that have been traditionally national in focus and scope. In the case of the UK, however, a partial solution to this issue has been found in the organisation of COBRIG (the Council for British Geography), through the development of regional divisions, and this will be looked at again in more detail later in this chapter.

The daily control of policy and implementation of national directives (such as a new national curriculum) falls to local school districts ("local authorities"), individual schools, and teachers. Private education in the UK is very popular. Private schools are, however, bound by the same dictates as other publicly funded institutions, especially at the more

senior grades when standardized exams play a significant role in determining future study options for students.

The situation in the United Kingdom has many similarities to that of Australia and, as we shall see later, to the United States; yet there are fundamental differences in how curriculum changed in the United Kingdom, or more specifically England and Wales due to the political structures mentioned about (again, the situation is fluid). The reason for this relates to a second important consideration; the passing in 1988 of the Education Reform Act (ERA) and the subsequent development of the National Curriculum (NC) for England and Wales. Prior to 1988, control over curriculum and schools had rested with Local Education Authorities (LEA); this still is the case, but from a curriculum point of view, LEA authority over ages 5-16 has become more constricted within the NC. Although higher level exams were, and still are, set and marked externally (to allow for university entrance), much of the content and process of curriculum change and implementation formally resided in the LEA or the local schools. Examination boards and the university geographers to set what would be tested, and therefore determined what changes in curriculum would occur. Williams (1996) explains this history very well and uses the example of how change occurred in a big way in the 1960's when the "new geography" was developed, and changes in research and emphasis at the tertiary levels permeated the secondary levels. In this case, geography teachers, as a result of curriculum changes, were in essence told that they had to start teaching new concepts and new ideas (presumably in new ways).

Binns (1993) has reviewed the history of how geography became a part of the National Curriculum. He remarks that in "just over a decade we have come a long way from the position in the early 1980's when there was doubts as to whether geography would survive as a school subject in its own right (Binns, 1993, p.102)." Although concerns have arisen about the content of the national curriculum, and the process for changing it, Binns suggests that geography's place is at least secured. "However, the debate about the nature of this curriculum continues, in the knowledge that sooner or later the statutory requirements may be reviewed and changed, as has already happened with the [sciences]"

(Binns, 1993, p.103). The key point here is that geography is in the national curriculum of England and Wales as a matter of law. In order for curriculum change to occur, regardless of who influences the change, an act of law will need to be changed.

In speaking of the National Curriculum in England and Wales, it is important to note that the ERA Act was an example of curriculum change impacting geography in the late 1980's and beyond. The role of professional geographers in this change has been clearly stated by Bailey who said:

The officers and members of the three principal professional bodies working in the field of geographical education, the GA, the Royal Geographical Society (RGS) and the Institute of British Geographers (IBG), commented upon almost every curricular matter raised by the Secretary of State and DES officials, and relentlessly argued the case for the educational value of modern geography (Bailey, 1992, p. 70).

Bailey remarks on the need for further collaboration between these organisations. As a partial response, and to increase the vertical integration of geographic education associations, the GA developed and promoted linkages with primary school teachers - even going so far as to create a specialized journal entitled *Primary Geography* in 1989 (Wise, 1993).

The situation in England and Wales changed after 1988. The ERA ensured that there would be a National Curriculum for ages 5 through 16. Thanks to the work of the Geographical Association (GA), among other geographical associations, geography had been assured a place in the National Curriculum for England and Wales (Naish, 1992. pp. 41-42). Naish (1992) discusses how pivotal the Geographical Association was in the years leading up to and following the ERA of 1988, in particular the work of the GA in responding to the Secretaries of State for Education (Sir Keith Joseph in 1987 and Kenneth Baker in 1989), when the GA published two works on geography education; *A Case for Geography* in 1987 and *Geography in the National Curriculum* in 1989. Of particular note here is the fact that it was not only geography teachers who were involved in the GA with these efforts, but also geography educators from teachers colleges and

geographers from universities. This situation was also reviewed by many other authors during the period when the ERA was enacted (see Bailey, 1989 and 1992; King, 1989; Rawling, 1992; and Gardner and Hay, 1992), and their conclusions were as those of Binns (1993) and Naish (1992) outlined.

In a recent issue of the journal *Geography*, Andrew Goudie stated in simple terms: "to put it starkly, where would geography be in the National Curriculum without the GA, and where would geography be in the universities in years to come were it not in the National Curriculum " (Goudie, 1993, p.338). Then the President of the Geographical Association, Goudie suggested that much more has to be done to cross the great divide between universities and schools. Obviously, many geographers and geography educators believe that their ability to affect curricular change through the National Curriculum will depend upon much cooperation and involvement of professional geographers, geography educationalists and geography teachers. To be effective in this regard, however, attention must be focused on a particular standing issue: a continuing lack of sufficient connection between school geography teachers and academic geographers.

Overcoming the Tertiary-Secondary Divide.

In 1993, Goudie raised the 'red-flag' and warned geographers and geography educationalists that there was a "great divide" between secondary and tertiary geographers and, without overcoming that divide, both would suffer (Goudie, 1993, p. 338; and Morrish, 1994, p.181). The problem was that in the 1970s and 1980s the divide had grown because of diverging interest and external pressures. Preoccupied with other research and funding issues, as well as changes in geographic research, professional geographers found little common ground with schools. Moreover, geography in schools had become another means to reach educational goals rather than geographical learning, and so the case could be made that geographers at the tertiary level felt geography was

not being taught in the schools. However, in response to Goudie, Daugherty and Rawling stated that it "is no longer appropriate to think of schools and higher education as the junior and senior partners in teaching geography (Daugherty and Rawling, 1996, 369)", a view endorsed by Gerber and Lidstone, when they stated:

It was observed during the 1960's and the 1970's in much of the industrialized world that geography was a respectable academic pursuit and that geographical educators were those people who weren't quite good enough to be geographers, but who held a strong interest in the discipline. They turned to education as a second resort and made the most of their educational training in the realm of geographical education. Since then the field of geographical education has gained respectability to the extent that it is now a very popular one across the world and holds the largest number of members of any Commission in the International Geographical Union (Gerber and Lidstone, 1996, 9).

The importance of geographers from all parts of education service working together has never been greater. To make that collaboration possible and effective, one of the most significant developments of recent times had been the creation of the Council of British Geography (COBRIG) in 1988. Daugherty and Rawling (1996, 360-361) clearly elucidated the reality of the tertiary-secondary interface and the role(s) that could be played by professional geographers and geographic societies. They outlined the development of a new cooperative spirit in face of serious national, political and educational challenges. From this developed the collaboration between the GA, RGS and IBG to put in place a high level, peak organisation where all issues and concerns could receive equal voice and whereby geography in total could be promoted to those external events causing so much concern.

So far, COBRIG has played a muted role in the public debate about school geography, but the potential of having one, small, representative body to speak promptly on behalf of the subject, as and when required, cannot be exaggerated. At present it remains to be seen whether this potential will be realized and COBRIG will contribute as powerfully to

the public advocacy of geography as have some of its constituent associations. COBRIG, however, is “well placed to encourage liaison and information exchange.” (Daugherty and Rawling, 1996, p.373). Through the inclusion of the primary education sector and the business community, cartographers and regional associations, it has become the nearest thing to a peak organisation of the geographic education sector and policy network. COBRIG also provides a UK example of horizontal integration, for its membership is drawn from the Royal Geographical Society (with the Institute of British Geographers), the Geographical Association, the Scottish Geography Teachers Association, the Ordnance Survey, the Society of Cartographers, and other regional and national organisations. Again, considering the political organisation of the UK and UK education, the regional representation within COBRIG is essential and instructive.

In response to some of the concerns over the tertiary-secondary divide, Binns suggests that the actions of advocacy, consultation, submission of papers, and the like is "an everyday necessity and the geographical societies, individually and through [COBRIG], have become adept at promoting their views " (Binns, 1993. p.109). Also in discussing the curricular need to further strengthen such linkages between professional geographers, geography education specialists and teachers of geography, Rawling (1992) stated that,

[T]he teacher's task of identifying key ideas and appropriate content, of interpreting the National Curriculum and of communicating these intentions to parents would be considerably enhanced if real dialogue existed between the academic world and the world of 5-16 teaching. We already have in [COBRIG] a body well placed to strengthen links and initiate further dialogue; might this not be a key role for COBRIG in the 1990's (p.308)

While a number of researchers indicate there is some strength and vitality to geography as an academic discipline within higher education and research (Binns, 1991 and 1993; Gardner and Hay, 1992; Richards and Wrigley, 1996), they also mention the need for it to maintain close ties to schools. Even though the academic community cannot, directly, control curriculum in schools, there are mechanisms for involvement and influence which should be utilized to the fullest. These mechanisms have included the National

Curriculum Working Group for Geography and COBRIG, as well as the education committees of the RGS-IBG. Academic and professional geographers have maintained close ties to these processes; the various associations and cross-association groups show large numbers of professional geographers to be among their members.

The experience and membership of the National Curriculum Geography Working Group points to non-geographers exerting influence in curriculum matters. Finding an appropriate means of discourse to satisfy both the professional needs and the interests of the lay persons representing a wider public interest in the National Curriculum was a challenge. This required that the linkages between the academic and teaching community be extended further to include the public, or non-geographic community. What came of all this was a deeper appreciation that the place of geography in higher education is ultimately linked to the health and vitality of school geography. Linkages between those sectors, and the private sector must be continued (Binns, 1996; Unwin, 1996). In general then, the developments related to geographic education in the UK resulted in some of the secondary-tertiary divide being overcome. A result of that lessening of the 'divide' was the extension of linkages to the professional geographers in government and business, along with a renewed emphasis on public promotion and raising awareness through broadly based - or horizontal - associations.

The current situation for geographic education in the UK

Rawling (1992) provides an exceptional overview and summation of geographic education in UK schools over the last 20 years, breaking down the past three decades into major shifts or transitions. Each of these stages is a useful starting point for looking at the overall development of geographic education world-wide. The periods she identifies could well be used as stereotypical stages of development for geographic education in areas outside the UK. For example, during the 1970s (what Rawling calls the "Seven Fat Years"), geography was transformed into "new geography" because of the so-called quantitative revolution. Because of the available support for research and increased teaching numbers at all levels, many curriculum projects developed that focused on

geography in the classroom. This was, as Rawling classifies it, a period when geography was “a medium for education”. Geography came to be seen as a subject of value. Later, in the early and mid 1980s, geography had to re-state a case for itself as new subjects were proposed as being better than or subsuming geography (e.g.: social studies and environmental education). With the development of the NC and the efforts of the geographic associations by lobbying for geography's place in the NC, came a period of creating reports, establishing committees, and seeking to promote the educational value of geography.

Key to this discussion of geographic education is Rawling's' portrayal of the years leading up to the National Curriculum as a time when geographers viewed geographic education as being "straitjacketed into the NC". However, this also saw the development of committees whereby geographers and non-geographer at all levels could communicate issues and concerns. She suggested that the period after 1993 should be referred to as a time of "reopening the exchange" with the academic geographers and making the transition to the NC work. Her prediction beyond the year 2000 includes the idea that more barriers will be broken down through increased awareness of the value of such bodies as COBRIG that provide opportunities for geographers at all levels to work together towards the enhancement of geographic education (Rawling, 1992).

Perhaps one should reflect upon Rawling's prediction for geography past the year 2000 to see if any progress has been made. The 1999 conference on Learning and Teaching Geography in Higher education (see Healy et al, 1999) included a paper by Rawling (and others) that suggested higher education could learn much from the approaches and methods used by geography educationalists in securing a place for geography in the UK, Australia and the United Kingdom. No representative from Canada was present at that conference. The fact that such a conference on higher education would include, even request, perspectives from the primary and secondary levels, perhaps indicates the secondary-tertiary 'divide' may no longer exist - at least among the nations present at that meeting.

The current situation in the UK is a positive one for geography for other reasons. The development of the Geography Discipline Network (GDN) is an example of how higher education, the private sector, practicing geographers and geography teachers have been called to the challenge of creating and disseminating curriculum materials and research through new Internet technologies. The GDN (<http://www.chelt.ac.uk/cl/philg/gdn/>) also supports curriculum and the dissemination of materials and development of new methods and use of new technologies. GDN has obtained funding for such curricular projects (see: GDN, 1998 and 1999). And one should also remember that the UK established its own Geography Awareness Week in 1994, and the associations represented within COBRIG in support of these initiatives include "over 40 cognate bodies" (Binns, 1994, 291). Support from associations includes in some cases funding from government and the private sector, as well as assistance from members.

And what of the future? Rawling predicts more professional involvement and suggests the GA move towards regional coordination may help that development *if* combined with an increased emphasis on coordination with COBRIG.

Thus, the seven years 1993-2000 have the potential to become the seven more balanced years for school geography, avoiding the over-indulgent confidence of 1970-77 and the narrow political emphasis and impoverished curriculum thinking of the 1980-1987 period. With a slimmer, fitter geography curriculum, established and implemented confidently for 5-19 year olds, we may even have some energy left for a new period of classroom innovation, beyond 2000. The next seven years are a time to make it all work (Rawling, 1992, p. 110).

The current public exposure and discussion on curriculum matters in the popular media means that geographers have a certain level of ready-made cache. This was mentioned during the 1993 Geography Olympiad in London when the Assistant to the NGS president, G. Grosvenor, said that it was harder to promote geography in the UK because it was not a "crisis" subject (Walford and Haggatt, 1995, p. 8), for it had gained a high enough level of public profile and understanding that people accepted its position and in fact felt its status was well deserved. These sentiments did not develop overnight, nor could they be taken for granted. Much hard work, networking and political action

remained. Yet it is interesting to note that the view from outside the UK was one that suggested geographic education in the UK was being viewed as a vital, sustained subject.

Even though the activities and progress thus far have done much to enhance the position of geography in UK schools, making the subject more secure and sustainable, much work remains. What is needed now is more time to build upon the foundations that Storm (1989) mentioned, as outlined above. Now that geographic education has a place in the curriculum, it is essential to maintain the coordination and integration of associations. Beyond that, there is a need in the UK for the establishment of more secure funding for such integrative actions. As we shall see in the case of the United States, such financial footing provides more security for longer-term strategies and even short-term 'crises'. There is a need, now that the political element of geography seems in place (i.e.: The NC), to bring back some of the communication between the discipline and the school subject so that *geography* is being taught as geography, rather than as some politically acceptable, multi-disciplinary subject (Marsden, 1997, p.249-250). Indeed, in an effort to secure geography's place, the GA has published a position statement on geography's nature and value in the curriculum, and established greater linkages among peak organisations such as the IGU and the European Standing Conference on Geography (GA, 1998; Binns, 1994, 291).

UK Summary

The above review of geographic education in the United Kingdom has shown that even the oldest geography and geographic education associations in the English-speaking world can find new ways to work together and overcome a perceived 'divide'. The manner in which this was done is as important as the reasons for it being carried out. According to researchers in the UK, as we have seen, the main factor that led to a renewal of inter-association cooperation was the political and educational situation leading to the development of a national curriculum. The National Curriculum of the UK provided the fuel that fed the fire of associations devoted to geographic learning. The

success of geographers and geography educationalists in obtaining a high level voice and status within the process of developing the National Curriculum has proven that the associational model, as it relates to those associations being active interest groups, can be instructive for other jurisdictions. As Walford and Haggett have made clear, the future place of geography is a "strategic-political game" (1995, 9). The key elements or lessons to be learned from the UK case include (with some examples from the study of the UK case),

- a clear, public pronouncement of the value of geography (*GA position statement on geography*)
- cooperation among geographic associations through peak or coordinating bodies (COBRIG)
- joint committees (RGS Education Committee, National Curriculum Working group)
- private and public involvement in the promotional activities (Ordnance Survey)
- a tradition of strong, yet flexible publications (*Geography, Primary Geographer, Journal of Geography in Higher Education*)
- increased public profile (Geography Awareness week)
- regional and international representations (the GA regional groups, IGU)
- innovative use of new technologies (geography discipline network)

Through such actions, the UK geographic community has been able to form strong linkages that are sure to promote and enhance geographic education for many years to come. In addition, it should also be recalled that Walford and Haggett were writing in the context of the UK; but their work may be instructive for other nations. The changing nature of geography as a discipline must be mirrored in the schools and the value of the subject must be proved within statutory systems now in place, along with the necessary promotional activities to "capture the interest of students in schools" (Walford and Haggett, 1995, 7-11).

THE CASE OF AUSTRALIA

Geographic education in Australia

As the previous case study has shown, the application of concepts and research related to interest group organisation (i.e.: vertical and horizontal integration, policy networks and cross-association collaboration) is useful for analysing the role of associations involved in geographic education. This method is just as applicable to the following review of the case of geographic education in Australia. The over-arching concern in this review is to seek out the practices employed by geographic associations in Australia that are attempting to influence curricular development and change, thereby enhancing the status and place of geography as a school subject within Australian schools. Such influence is, as has been shown, political in nature and influenced by broader social, economic and political change. Or stated another way:

There is no doubt that education serves a major social purpose and that it should respond to changes in society. However, restructuring and policy changes tend to be so correlated with changes in government that it seems more than a coincidence when these changes occur (Gerber and Lidstone, 1996,3).

In Australia the Commonwealth government oversees transfers of funding between the federal level and the states - much along the lines as the United States. In 1998, some \$3.9 billion (Australian dollars) were transferred to states through grants and assistance programs (DEETYA, <http://www.deet.gov.au/schools/division.htm>). However, such funding does not mean that federal agencies direct curriculum, instruction or administration - all of which are organised at state level. The Commonwealth government, through the Department of Employment, Education, Training and Youth Affairs (DEETYA), and especially its School Division, works with the states and territories to establish common goals and practices that support national needs. The programs that the Schools Division implements and administers range from drug education to quality outcomes; but these are not directly related to curriculum development at any level that may influence what is taught within the classroom (see DEETYA www.deet.gov.au). Gerber suggests that in “addition, the federal government

influences the school curriculum via its own direct funding projects.” Furthermore, directives or promotions from the federal level means that “emphases on preparation for employment, basic skills and computer literacy, have all had to be considered in the school curriculum” (Gerber, 1987, 27). Recent statements coming from the Department of Employment, Education, Training and Youth Affairs (DEETYA), clearly support that utilitarian contention and the broadly based viewpoint related to educational goals.

The Commonwealth's highest priority in relation to school education is to improve the literacy and numeracy skills of all young Australians, given that the attainment of appropriate literacy and numeracy skills is a prerequisite for achievement in all subsequent education and training and is critical to successful participation in the labour market (see: DEETYA, <http://www.deet.gov.au/schools/csp/part1.htm>).

Within each Australian state, a Board of Study is the primary organisation that creates and approves courses or curriculums developed in that state. Recently (1997) there have been numerous documents and consultative reports created which seek to re-examine or change existing geography curriculums in various states. New South Wales and Victoria have released draft syllabuses for comment and reviews. These have been developed by committees that included geographers and geography teachers, and input was accepted from associations and interested parties. The current process of curriculum development is not new - its process, as we shall see later, can be traced back over the last thirty years.

In the case of the administration of Australian education, curricular implementation is in the end a school based process (Lidstone and Wiber, 1995; Powell 1984, Biddle, 1996; Gerber, 1987 and Gerber & Lidstone, 1996). This is indicative of a move to "devolve responsibilities in education so that each school now has a major say in the curriculums which its geography teachers implement (Gerber ,1987,27). " This has also been pointed out by Powell (1984, 279) who mentioned that "in the current highly unstable milieu, decisions to retain, discard or expand individual subjects may be made for a host of reasons which are often school-specific...." and yet the “wider context of change is vital

nonetheless.” In terms of Australia, these areas of change are of particular concern to geographic education interest groups. Geography, as a discrete subject, exists in all states at the secondary level, but variation between state programs is important as it affects the development and status of geographic education in Australia as a whole. At the primary level it may be non-existent at all, and at junior levels it is more difficult to tell due to an increase in ‘generalist’ studies and combined curricular areas such as social studies (Lidstone and Wiber, 1995, 27-31; Conolly, 1996, 37; and Davey, 1996, 97).

While geography education programs can be supportive of the Commonwealth's broadly based goals and attainment targets, the fact still remains that the actual choices related to curriculum remain at the state and individual school level. The involvement of the governments is indicative of what Goodson and interest group researchers would suggest is material and pressure capital that could affect each subject's place in the curriculum; even though the syllabuses are not being dictated by government. Therefore it is critical for interest groups to be involved in order to balance the equation.

The political influence of professional associations seeking such balance is mentioned by Gerber (1987) when he states that,

One could expect that state education authorities would provide groups of advisors to assist in the implementation [and design] of these broad-frame geography curriculums. Currently this practice is not used. Therefore, Australian geography teachers usually seek help on teaching their subject from either professional associations or from the current crop of textbooks or from both (p.30)

Birch (1976, 12-22), also looking at the process of policy making in Australia in schools, divided stakeholders into voluntary organizations, professional education opinion makers, teachers federations, and organizations and associations. None of these, as examples, included professional societies related to geography, but they do make mention of how professional associations are a “prime source of professional opinion (Birch, 1976, 16).” Marginson (1993, 24) extended that idea and highlighted the important influence of

professional and voluntary educational efforts through “a large network [of] subject and discipline based groupings and ... professional associations and unions”.

Marginson suggests that such "groupings" when including parents, students and teachers, Create a more democratic means of influencing the educational policy directions of government. In return, governments will be " scrupulously careful not to compromise the right of these organisations to exist and to act, nor will they compromise their independence in matters of education policy (Marginson (1993) p.254)." The current role of government has developed in a spirit of co-operation towards co-ordination between state and commonwealth with the active participation of the associations (Marginson (1993, pp. 25-27). However, the example of economic and educational policy overlap is one of external pressures coming together to influence the extent and direction of change. Once again, we see that the political nature of educational change creates a situation where effective interest group organisation and action is needed.

Conolly (1996) introduces a significant concern related to the role of interest groups or special interests in the determination of what is included in the curriculum. Yet in the end, he also views this as a political process and he uses recent decisions by the New South Wales Board of Studies to include “cross curricula perspectives” as policy decisions at the state level which are, in part, based upon the role of interest groups - in this case environmental groups (Conolly, 1996, 43-44). Interestingly, during the Australian centennial (1988), there were concerns about the level of understanding or even basic “utility” knowledge about the nation by students and the general public (Conolly p.46 1996). This led to a greater emphasis on history and geography with both subjects becoming mandatory, within a two course framework, between years 7 and 10 (Conolly, 1996, 46-47). However, this is not as positive as it seems because the required content only needs to be covered over a three year period which means a very low level of actual teaching time, even though the level of geography was increased due to the public-political view or perception of the utilitarian status of the subject. Nevertheless, Lidstone and Wiber (1995, pp.31-31) caution:

The politicization of the curriculum and current moves towards a national curriculum may change the balance in the future so that the great progress that has been made towards achieving a high standard of geography education in Australia could be reversed.

Development of Australian Geographic Education

Extensive historical overviews of geography and geography education in Australia have been done by Powell (1984, 1986, 1988, 1990) and Biddle (1992, 1993, 1996). In colonial Australia, the need to take stock of resources and people, coupled with a firm influence of British education, led to a geographic education where “colonial children were expected to content themselves with bizarre gazetteer ‘geographies’ which seldom acknowledged the bare existence of Australia (Powell, 1988, 218).”

The 1880's “was an important decade for geography” (Biddle, 1996,17) when it was seen to be supportive of discovery and exploration. “Influential citizens in Sydney decided to form the Geography Society of Australasia and to establish a New Guinea Exploration Fund” the same year, 1883, that the National Geographic Society (NGS) was formed in the United States (Biddle, 1996, 17). Australian geography and geographic education associations trace their roots back to the New South Wales Branch of the Royal Geographical Society of Australasia (Powell, 1986, pp. 9-11; 1988, pp. 216-223). Important members of the societies became important contributors to other professional and amateur scientific associations. However, geography, “despite its experiential base in wider society, had only managed to consolidate that position at the most elementary levels of Australia’s schools.” (Powell, 1986, 11).

From 1883 to Australian federation (1901) several significant events influenced the beginnings of higher school geography education in Australia, the most important being the Keltie report submitted to the Royal Geographical Society in London in 1886 which affirmed that geography was well suited to academic studies and a more general education for all citizens in a period of rising nationalism and continued exploration. An increased emphasis on teacher education and methods, along with the development of a

more formalized field of education, led to the first syllabus for high school being created in New South Wales (Courses of Study for High Schools) in 1911. 'Gazetteer' geography was replaced by more academic programs with an Australian focus (Powell, 1986, p.12).

Developments in Europe, where geography was treated as a more systematic science with clear contributions to utilitarian, trade and militaristic functions, led to more political pressure and support for the subject. It was beginning to be seen as more than a descriptive subject that catalogued field notes of explorers. From this came the development and support for departments of geography in universities that established the basis of much of modern geography. In Australia such developments related to the need to survey, map and understand the new nation. Even so some authors suggest “Geography was considered to be a basic subject and the content of the syllabus was oriented towards the subsequent requirements of the Leaving Certificate examination and university stipulations relating to matriculation” (Biddle, 1996, 19).

Nationalism was being felt in all parts of scientific research and public service, and it was this context which gave rise to the establishment of the first geography department headed by Thomas Griffith Taylor at the University of Sydney in 1921. Griffith Taylor, one of the most significant figures in Australian geography, was the first President of the Geographical Society of New South Wales and editor of the *Australian Geographer*. He greatly supported geographic education in the schools and contributed to developing many texts for their use. J. Macdonald Holmes became department Chair when Griffith Taylor left Sydney for Chicago because of disputes with the University for failing to promote him to full professor, and because the scientific community ridiculed his views on the future of Australia. As Chair of the department, Holmes had a “direct and highly personalised impact on the geography curricula of New South Wales schools” (Powell 1988, p.223). Holmes, Griffith Taylor “and a handful of striving colleagues ensured the continued visibility of the subject in the wider community and built foundations for pure and applied geographical work in the natural sciences, social science, and humanities”

(Powell, 1986, 23). When the Geography Department at the University of Sydney celebrated its 75th anniversary a commemorative booklet suggested that,

From the time of Griffith Taylor, staff members have played an active role in curriculum development for new South Wales school geography. Staff have also contributed to the development of secondary geography overseas. Finally, the Department has an almost unbroken tradition of service on the Examination Committee for the Higher School Certificate (and its predecessors) in New South Wales. (Geography Department, 1996)

Additionally geographers at the universities, were overseeing the syllabuses and examinations; 1921 saw Griffith Taylor become chief examiner of geography for schools in New South Wales. However, not every school benefitted immediately because exams were state based and since geography was only taught at the University of Sydney, New South Wales led the way for many years in terms of the training and support of geography teachers (Biddle 1996, pp.19-21). Teachers attempting to provide some resemblance of geographic instruction in states without a department of geography within the tertiary sector could not provide the specialist insights of geography graduates from NSW. This created a problem for geographic education because there was little chance for support from the few small (and young) departments of geography. An influx of immigrants and geographers from the USA and UK, along with a brief return of Griffith Taylor to consult on establishing other geography departments, created a surge in interest in geography that resulted, in part, in new geography departments at other universities in states outside NSW. However, due to the small size of these new departments, state level support for geographic education from the tertiary sector was some time in establishing a solid footing. Even so, the first fifty years of this century saw a good start to the development of supports (i.e.: publications, research, teacher in-servicing) that would be enhanced over the remaining half of the twentieth century (Biddle1996, p.29). Close to this time, on an international level, there was a clear emphasis on geography as a means for enhancing education and international understanding culminating in the "1950 UNSECO meeting in Toronto under Neville Scarfe which produced the 1951 book *Some Suggestions on the Teaching of Geography* (Biddle, 1996)."

In a study of curriculum change between the 1950's and the 1980's in New South Wales, Biddle suggested changes had been "politically motivated, while others have been a reflection of the improvement, among teachers, in their educational qualifications, particularly their knowledge of the curriculum process, which led them to demand representation on syllabus committees and boards of studies (Biddle 1992, p.247)." In 1954, the process of change in the curriculum, "appears to have been developed so that the Head of the Geography Department at the University of Sydney had complete control of the courses taught in secondary schools (Biddle 1992, p.248)". Therefore, from the first periods of associations, geography courses and departments being founded through the Second World War, academic geographers were the only group that had significant input into geography curriculum change. As shall be seen, It was after this time, and up to the present, when geographic education associations and geography teachers were able to have input into the change process.

These years were also a period, internationally, when general or progressive approaches to education were making some considerable headway. Review upon review suggested the solution to inadequate education was to "eliminate the teaching of disciplines and to introduce new integrated subjects into the school curriculum (Biddle 1993, p.149)". In New South Wales, this took the form of the Wyndham report in 1957 which resulted in the development of a compulsory social studies course in 1961, and the creation a new geography syllabus in 1965. But this curriculum construction had fewer academic geographers involved and more teachers, with an examination process outside the universities, with a "corporate marking system when 150 markers were congregated in the one room and all examination scripts were marked under supervision (Biddle 1992 pp. 251 - 252). "

To ensure the successful implementation of the new programs that grew out of the Wyndham report a process of information diffusion was developed by the Geography Syllabus Committee whereby "notes attached to the curriculum, conferences, seminars, publications in journals and newspapers" would allow teachers to keep pace with

development in geography as a discipline (Biddle 1996, p.25). This included the co-operation of geography departments, teachers colleges, associations and societies, the media and the school systems themselves. Significantly, and mirroring the UK example, this also saw the development of more effective forms of communication, such as the *Geography Bulletin* in NSW which became, and still is, an important means of relating developments and methods to geography teachers. The Geography Teachers Association of New South Wales worked with the Geographical Society of New South Wales, the heads of geography departments, and the History Teachers Association to strengthen the place of geography and history as core subjects at the senior level and to restrict the more generalist approach of social studies to the lower junior levels. The cumulative effect of these actions was that the associations became viewed as essential partners in the curriculum change process and in securing a place for geography. The horizontal integration of associations meant that a wider audience and broader network of potential supporters was established.

The reaction to Wyndham outlined above is the first indication of true horizontal and vertical integration of co-operative efforts to promote geographic education - it is the precursor to real interest group activity and a policy network forming. The success (or failure) of this effort, especially in light of the change from the 1950s, would determine further action as syllabuses changed over the next thirty years in New South Wales geographic education, and also in other states. For example, in 1967 in South Australia a “similar re-organisation of the secondary school systems provided the opportunity for the revision of syllabuses.” and meant that the Geography teachers association of South Australia developed senior school syllabuses using a conceptual framework based on the structure of geography (Biddle 1996, pp.25-26). In order to be successful, similar integration and networks among academic and teaching geographers occurred in order to assist teachers in need of help with new programs and courses. This method became a normal procedure - lasting until the present - and was emulated by all other state level geography associations.

Geographical and curriculum research in the 1960s and 1970s led to teachers becoming confident as specialists and professionals. They become more integral to curriculum change processes. This had the result of more active teacher roles in curriculum change through the various syllabus committees (Biddle 1992, p.247 and 1996, p.25). When the International Geographical Union's (IGU) Commission on Geography in Education was held in Sydney in 1973, geographers and educators met to put forward the rationale for geography as a school subject **and** explained and described the approaches/questions best suited for geographic explorations within the classroom (Davey 1996, pp. 95-96). Between that 1973 meeting and the development of the Australian Geography Teachers Association position paper on geography in 1988 (see: [AGTA] 1988 available <http://www.agta.asn.au>), there were pressures for moving school curriculum towards more general social or environmental education approaches that could take the place of geography (and other subjects), eventually leading to calls for a national curriculum. Geography as a school subject needed to secure a place in such curriculum change. Davey suggested that such an "[a]rticulation of this role is of the highest priority in the context of a diminution of geography's curriculum status (Davey 1996, p.97)."

During the 1980's and early 1990's, changes made to elements of geography syllabuses were met with extensive discussion and communication among geography teachers through their respective geography teacher associations. The geography syllabus committees, where teachers were finally the majority of members, "would follow a process of continual consultations" which included questionnaires, conferences, publishing of articles in association journals and other similar actions, including co-operation with related interest groups (Biddle 1992, pp.257-259). These actions were taken because of a perception that geography in schools was under attack by opposing or divergent interests (Davey 1996, p.97). However, because the Australian geographic education associations were forming policy networks that were vertically and horizontally integrated, any real or perceived lack of status, or threat to the place of geography, could be dealt with more quickly and effectively.

A problem in Australia at this time was the attitude of some tertiary level geographers towards those in the secondary level because teachers were breaking the control or influence previously exerted by academic geographers on geographic education (Powell 1988, p. 227 and 1984, p.277). From the teachers' perspective, this was a period when they were taking a more active role within their associations to determine the future direction of education and curricula in Australia based upon higher levels of teacher training and professionalism. This was also a time when the quantitative revolution was being experienced in geography, and its implementation in the schools meant a decrease in some enrolments in some states, and dissatisfaction on the part of many teachers who felt less than comfortable or adequately trained to handle this 'new geography'. (Conolly 1996, pp.37-38; see also Powell 1990 and 1988). Concern on the part of the tertiary level geographers was highlighted by Powell who summarized the situation by stating that academic geographers have lost their traditional place of influence in the secondary level and, as a result, other new subjects were beginning to supplant geographic education (Powell 1990, pp. 9-10). Powell may have been right in his prediction as indicated by a decrease in the percentage of students writing geography HSC (High School Certificate) exams from 21% in 1989 to only 14% in 1993 - a number "less than that of 'legal studies'" (Powell 1990, p. 9-10). This has had an impact on the tertiary level, as well, for it is "common to find that between half and two thirds of the first year geography students in Australian universities have not encountered the subject in higher grades of school - and disturbingly large numbers report no previous formal contact with the subject" (Powell 1990, p. 10). Powell points to this as a potential recurring cycle, especially as the changes in higher schools become mirrored at the tertiary level with a decreased emphasis on any sort of disciplinary approaches, whereby teachers lose touch with the disciplines they are supposed to be teaching becoming, instead, "deeply embroiled in other versions of the restructuring transformation (Powell 1990, p.11)".

"Much of the national educational reform of the 1980's and 1990's has been driven by a need to improve Australia's economic performance for a changed economic-technological 21st century." (Conolly, 1996,38). In recent years this has meant a move towards more utilitarian and national level or flexible curriculums such as suggested by

the 1989 Hobart Declaration between the state and territory ministers of education and the commonwealth which outlines agreed upon goals for education. The problem with this is that "Such an approach is somewhat distant from the concept of a core that would draw on philosophical or epistemological arguments for its rationale (Conolly 1996, p.42)." "There is no place for geography" because this creates a "minimalist curriculum where students are assessed for their achievement of basic skills in language and number competencies (Lidstone and Wiber 1995, pp.32-35)." In order to effectively find a place for geographic education in a changing curriculum, and to avoid a growing gulf between academics and school geography teachers, there was a clear need to establish a lasting and more co-ordinated program to integrate associations and create an effect interest group policy network. The next section looks at such an integrative body through a brief description of geography education associations in Australia.

The nature and role of geographic education associations in Australia,

The Australian Geography Teachers Association (Inc.) (AGTA), founded in 1967, is the national secretariat of the various geography teacher associations in each state and territory. Biddle offers an excellent overview of the educational environment that led up to the creation of the AGTA (Biddle 1993, pp.149-150 and 1996, pp23-27). Both state and national level associations are involved in developing curriculum materials, professional development conferences and workshops, and serve on committees or advise (lobby) with regard to curriculum developments (Gerber 1987, p.32).

In order to deal effectively with change in both curriculum and policies in the school system, AGTA acts as a lobby group (www.agta.asn.au). The affiliate associations of the AGTA are the individual state and territory geography teachers' associations. Most of these groups have their own Internet/www sites, along with their own publications and conferences. The lead agency, the AGTA, assists the state level bodies through the publishing of a journal, conferences, a newsletter and sponsorship of other occasional publications. Also, many texts and curriculum material are created by teachers with the support and funding of the professional associations.

In addition to the above, the AGTA is one of a group of organisations involved in more broadly based initiatives, such as cross-association conferences and publications, and the development of specific curriculum support and promotional materials. Such projects developed out of a growing concern on the part of geographers and geography teachers with regard to the status of geography in schools and universities, and the changing curriculum and new 'approaches' to education being put forward by the education departments and other interest groups at the federal and state level. The effectiveness of any such initiatives is related to the horizontal or cross-association connections between the AGTA and such groups as the National Education Forum, the Institute of Australian Geographers, the Committee for Geography of the National Australian Academy of Science (AAS) and the Australian Federation of Societies for the Studies of Society and Environment (<http://www.agta.asn.au>).

Before looking at the response and organisation of horizontally integrated geography associations, it may be best to mention briefly the factors or conditions external to the associations which led to the need for increased efforts and co-ordination on their part. Recent pronouncements about new directions for education in Australia, some of which have been based upon work resulting from the Hobart Declaration in 1989 and others coming from specific proposals from Boards of Study (see: Board of Studies New South Wales, 1998, and Board of Studies Victoria, 1999), have suggested less emphasis on subjects and disciplines and more emphasis on generalist studies. Such developments towards excluding discrete school subjects like geography result from pressure within the educational system attempting to effect change. To meet such "forces", geography teachers must become more active in promoting and communicating the need for their subject within the overall programs of study in schools (Gerber 1987, p.40).

According to Davey (1996) and Conolly (1996), environmental education is also as an area that has in the 1990's been increasing in its potential to move out of the curriculum. New developments in curriculum, between 1992 and 1994, point out that geography is only part of larger 'Key Learning Areas' such as 'Studies of Society and Environment' that

do not recognize the value of a uniquely geographic approach (Davey 1996, p.97). Davey goes on to suggest quite clearly that the aims and objectives, skills and methods of a geographic approach are supportive and common to broader social and environmental studies - they can be co-operative and not competitive (1996, p.103). Lidstone and Wiber (1995) highlight responses to these new Key Learning Areas made by the Royal Geographical Society of Queensland. They pointed out that geography should be considered a subject which can be both an art and a science, while also raising concerns about the larger implications for teaching training due to a potential for teachers to be expected to cover a very large number of subjects within one course. This could mean no one teacher would be able to provide adequate and proper instruction. By asking teachers to be masters of all subjects, a situation develops which sees the degradation of learning, and it is suggested that Australia should follow the US model as a means for geographic associations to fight the trend towards highly integrated, non-disciplinary programs. By supporting actions based upon the alliance movement of the National Geographic Society and others, it was thought that the AGTA could create a "body of teachers who regard themselves as geographers and who have an up-to-date grasp of the dynamically developing discipline (Lidstone and Wiber, 1995, 40)." Such action could do much to counteract the concerns raised by Biddle (1993) who suggested in strong, yet clear, language that it was the geography teachers themselves who "assisted in undermining the position of geography in schools because they did not give any support to their geography teachers' association; in fact, many were not committed enough to belong to their association or subscribe to the cost of their journal.(Biddle 1993, p.153)".

Higher Education and geographic education in Australia

And what of the academic geographers and their organisations response or activity? It is certain that without geography as a research and academic discipline, geography would be weakened as a viable school subject. In the Australian context, the relationship(s) between geography and geographic education - as well as between geographers and geography teachers - has been thoroughly discussed by Powell, who is well known for historical and biographical publications on geography and geographers. He has also been

involved in geographic education and was previously a President of the Institute of Australian Geographers (IAG). Powell suggests that academic geographers “were caught unawares when new course descriptions proudly announced the arrival at the secondary level of yet another lavish smorgasbord (1984, p.285).” Powell later stated that one of the difficulties faced by geography, as a discipline in the whole educational experience, was that many geographers did not belong to the Institute of Australian Geographers (IAG). What concerned Powell was that this could have dire consequences for geography education because “the sins of tertiary teachers will always be visited on secondary education, no matter how well the schools use their new autonomy” (1988, pp.228-229). Powell makes the point that progress had been made between the 1960's and the 1980's because, in his view, the IAG was “more representative of geographical workers in schools, public service and tertiary education that it was (Powell 1986, p.23).” One can infer that without the involvement of academic geographers in school geography, the strength of the discipline at higher levels will be compromised.

Of great concern in this thesis, and already seen in the case of the UK, is the suggestion that the “gulf between Australia’s secondary and tertiary systems is widening (Powell, 1986, 23).” He points to external factors by saying that “our schools are subjected increasingly to pervasive social and political pressures.” And to his fellow academics he continues: “Professionals in tertiary institutions continue to depend very heavily on the schools, but they have surrendered most of their direct influence over them and are completely ignorant, for the most part, about the forces now transforming the secondary system”. Referring to a period when geography at universities had greater influence over higher school geography through their authorship of syllabuses and their control over the examination process, he states: “if this complex environment has become unfamiliar territory for many of us, then we can do no less than to resolve to conduct a careful reconnaissance, we must prepare for a re-entry on less favourable terms than we enjoyed a decade or more ago (1988, 275).”

It is important to reflect on Powell’s views and analysis of the state of geographic education in Australia and the relationship of professional geographers to that process for

several reasons. First, this is one of the few recorded studies by an academic geographer which attempts to dissect the history of geography as a discipline in Australia and then connect its vitality to that of secondary geographic education. Second, Powell, together with a number of other geographers and geography teachers in each state and territory, attempts to survey the state of geography in the high schools through the use of enrolments and examination statistics, as well as with in-depth interviews with teachers from each state.

The rise of horizontally integrated geography organisations in Australia.

The call for more cross-association co-operation among Australian geography and geographic education associations predates the establishment of any such horizontal arrangements. For example, in 1985 Biddle suggested that there is "considerable scope for more co-operation among the members of the geography community in Australia" and that it should be "possible for members of the IAG and AGTA to combine their expertise, identify relevant information for topics in each of the state syllabuses, and provide teachers with a summary and references through the various state association journals (Biddle, 1986, 38)". In response to this need for more horizontal integration, the AGTA, IAG, the Royal Geographical Society of Australasia, and the Australian Institute of Cartographers formed the National Geography Support Project (NGSP) to expand the public awareness of, and activities in, geography. The success of this co-ordinating body can be seen in the establishment of a Geography Awareness Week in 1989, among other activities such as those called for by Biddle (see Smith 1989, pp.2-3; see also: <http://www.agta.asn.au>). Each of the associations involved in the NGSP was a pre-existing association with substantial vertical integration of activities within their individual associations. Each association represented a particular sub-component of a larger geography policy network. By joining forces, these vertical networks were strengthened and broadened along the horizontal axis, resulting in an enhancement of association integration and establishing an educational focus within the geography community.

Co-operation was expanded after 1988 to include work with the International Geographical Union, the Australian Academy of Sciences National Committee on Geography, the Australian Association for Environmental Education (established by a geographer), and continued efforts under the umbrella of the National Geography Support Project. Throughout this period, curriculum support and change took place with the involvement of both national level organizations and, more directly, local or state geography teacher organizations. Professional geographers had begun to see that it was vital for the health of geography at all levels to be actively involved and supportive of changes in geographic education, and education in general (Smith 1991, pp.2-3).

Gerber (1991) suggested in the strongest of terms that the National Geography Support Group had not stopped the slow disintegration of geography curriculum present in the schools. In comparing the situation in Australia to that of the United States, Gerber pointed out that Australian geography teachers and geographers should follow the example of the American Geography Alliances. Obviously, in the context of this paper, Gerber is suggesting that curriculum change cannot occur if the curriculum is not even present. Therefore professional geographers, in conjunction with geography teachers and their organizations, must become more active in the total process of curriculum change and protection. "Geographical education cannot sit back and relax as the world progresses. Those people who profess to be geographical educators must recognize that their future is not guaranteed." (Gerber and Lidstone, 1996,10). Geography educators still have to "overcome the public perception of their role"(Gerber and Lidstone, 1996,10).

In order to push along this agenda, there have been recent suggestions that the AGTA and the Australian National Committee for Geography (ANCG) of the Australian Academy of Sciences (AAS) meet at least twice a year, and that they should begin to develop materials, press kits and other devices which give the "status and authority that similar statements on science education gain from association with the Academy of Science (Biddle, 1999, 89)". It was the same ANCG which developed a highly visible document called *Rediscover Geography* that was useful for teachers and geographers as a means to defend the discipline and school subject in light of the movement towards a national

curriculum focus. Rediscover geography also did much to answer the question of what will be the "dimensions for the geography curriculum for the rest of the next decade which will enable the subject to assert its rightful place as core learning for all young Australians?" (Davey 1996, pp.98-99). It also helped to address the call for a more focused "marketing" of geography (Gerber and Lidstone, 1996, p.10).

In partial response to the concerns raised above, and the notion of using a more integrated approach to promote the value of geography within new curriculums, the Australian Federation of Societies for the Studies of Society and Environment (AFSSSE) was developed. "The Australian Federation of Societies for the Studies of Society and Environment (AFSSSE) is a consortium of five professional associations formed in 1994 to act as the peak organization for the broad area of study known as Studies of Society and Environment (SOSE) (see, <http://www.ash.org.au/teachers/afssse/>). " AFSSSE includes the Australian Association for Environmental Education (Inc.), the Australian Geography Teachers' Association (Inc.), the Business Educators Australasia (Inc.), the History Teachers' Association of Australia (Inc.), and the Social Education Association of Australia (Inc.). Through the AFSSSE, geography teachers and their associations could help put forward agendas for action, increased exposure through a larger body and help educate other non-geography teachers of the value of the geographic view. In one way, this peak organisation could be construed as a watering down of the role of geography teachers, or an acceptance of the new integrated studies approach. The reality may be that such a larger body was seen as a compromise and as a political necessity to deal with the real change and substantial pressures that no one group, or no one lobby, could prevent. In the end, the movement to diminish geography's place in the curriculum could not be avoided, and the challenge had to be met head-on. Geographic education did secure a role through effective integration with other associations. In this way, geography will be well placed for the inevitable changes in curriculum that will come.

Geographers and geography teachers at all levels of education and employment in Australia successfully sought for and developed a coordination for lobbying geography's place which required more co-operative activities between higher education, schools and

state level education authorities. Finally, it is useful and important to note that complacency is always a danger in larger horizontally integrated networks. Lobbying is not a 'one off' activity, nor is defending the educational value of a school subject a brief exercise. Or as Gerber reminds us:

Strong concerted, well-orchestrated actions are required now or geography will lose respectability in the school curriculum across Australia. The National Geography Support Group and its individual members must double - or treble- their efforts to lobby hard and achieve results (Gerber 1991, p.5).

A summary of the Australian case.

Two key points, among others, are important considerations in understanding how the curriculum change has occurred in Australia and how geography education associations have increased their roles in that process of change and enhancement.. These include the decreased role of post-secondary geographers in the development and examination process of school geography programs, and the increased role played by interest groups and a broader spectrum of people interested in geographic education (Biddle, 1992, 259-261). In addition to these, the following brief points are the essential, salient features related to how geographic education in Australia has managed to find a secure place in the curriculum.

- A realization of the political nature of the curriculum change process
- A history of strong publications (IAG, AGTA)
- The public promotion of the subject (Geography Awareness Week)
- Peak organisation publications *Rediscover Geography*
- A national focus (National Geography Support Project).
- Regional representations (state level geography teachers associations)

- Cross-disciplinary involvement
- Academic committees and associations devoted to common causes (Committee for Geography of the National Australian Academy of Science (AAS))
- Effective associations to deal with changes in curriculum (the Australian Federation of Societies for the Studies of Society and Environment (AFSSSE))

Through such efforts, Australian geography educators and geographers have found the means to communicate more effectively and address issues, concerns and external pressures. Central to their action has been the importance of having organisations that can speak to and for the issues affecting geography. Such interest must be present in order to give the positive initiatives and actions credibility in the eyes of the public, the geographers, teachers and (perhaps most important) the political masters who eventually determine what gets supported or funded. As we have seen, the essential nature of interest groups in Australian geographic education has been to find the means to make sure that any political actions that can affect geographic education, such as curriculum change, are preceded by pro-active measures by geographical associations.

THE AMERICAN CASE

An Overview

From the general public's point of view, geography in the United States is embodied in the National Geographic Society (NGS). From the perspective of the academic and professional geographer, the representative voice is the Association of American Geographers (AAG). In more recent times, during the last decade of the twentieth century, a number of associations have come on the scene or have grown in size which represent a sub-group of geographer. This is particularly true with regard to development of professional societies and interest groups related to GIS. One example is the UCGIS - the University Consortium for Geographic Information Science - which shall be discussed later in the epilogue.

What is critical to note is that, in the US, teachers of geography have had an association seeking to promote and communicate about the subject in schools for nearly eighty-five years. The National Council for Geographic Education (NCGE) was founded to enhance geographic education and promote linkages between researchers and practitioners of the discipline with those in the schools. A measure of success of NCGE is the degree to which membership is made up of not only geography teachers. NCGE, including its executive and committees, includes the most notable academics, geographers from business and other associations (such as Rand McNally and National Geographic). Beyond that, NCGE draws members from faculties of education, administrators at the national, state and local levels, as well as numerous members from similar categories around the world. An example of that involvement is the NCGE standards and workbooks developed with the support of the Association of American Geographers (Committee on Geographic Education, 1984).

The Educational Setting for Geography in US schools

The situation with regards to geographic education in the United States is very different from that of Australia and the United Kingdom. The history of school geography has been well described by many authors who have charted the subject's course from periods

of 'capes and bays' rote study in the early years of America, to a time in the early part of this century when geography had to fight for exclusion from the popular new subject of social studies (Jenness, 1990; Saveland, 1993; Stoltman, 1992a; and for an extensive historical overview of developments in the United States, see Hill, 1989; 1992).

It is also important to briefly note that education in the United States is a constitutional responsibility for the states. The federal government in the US does play an oversight role in matters of general policies that have national significance and may require either national level funding or legal instruments for implementation (such as constitutional issues related to segregated schools, prayer in schools or similar issues). The US Department of Education does, like Australia, provide some transfer of funds for the operation of schools. However, in terms of actual curriculum, the federal government can only assist in setting the 'agenda for discussion' and highlighting curricular issues that may have a broader national interest. As we shall see, many geographic associations developed skillful means to utilize that federal interest to put geographic education before the US nation and political systems.

Saveland (1993) suggests that the recent renewal of geography education in the schools needs to be placed in the context of larger issues and trends in education as a whole. In particular he mentions several key events such as the publishing of a *Nation at Risk* by the National Commission on Excellence in Education in 1983 and a Gallup poll in 1980 which showed the lack of geographic knowledge among American students and the public in general. The Gallup surveys would later become an often quoted, both in the United States and beyond, example of why 'geographic literacy' needed to be emphasized in schools.

Although not curriculum change or a curriculum document, the *Guidelines for Geographic Education* (Committee on Geographic Education, 1984) did mark a turning point for geography education. The most significant feature of this document was that it was a collaborative effort between the National Council of Geographic Education and the Association of American Geographers. As a direct result of the success of this effort,

both organisations (the NCGE and the AAG) joined forces with the National Geographic Society (NGS) and the American Geographical Society (AGS) to form the Geography Education National Implementation Project (GENIP) in 1985 (Saveland 1993, p.141). This was one of the first instances of associations at a national level setting a national agenda for geographic education that could be implemented and supported at more local levels.

A closer look at GENIP.

GENIP is an example of a higher level organisation within the US that horizontally brings together the activities and missions of various, vertically integrated geographic and geography education associations. In interest group terms, GENIP is an example of a peak association. It is, moreover, an example of a grouping within the policy network of geographic education that utilizes the horizontal and vertical integration to further the goals and actions of member associations with a highly visible and well supported (material and human capital) presence.

According to GENIP, it is defined as "a consortium of geography associations committed to improving geography education" and it acts as a "communication clearinghouse" (taken from, <http://genip.tamu.edu/>). From that simple mission, which applies to all levels of geographic education, GENIP has found a means to create a number of viable projects that seek to achieve such 'improvement'. Some of these projects, listed below, are directly related to curricular matters, while others are broader in scope and/or supportive of teacher training and promotion of the discipline and school subject. The associations that make up GENIP include, the American Association of Geographers; the National Geographic Society; the American geographical Society; and the National Council for Geographic Education. The AAG and NCGE provide office support services, while individual university department provide project co-ordination and host all electronic communications needs (this is currently done by the Texas A&M University Geography Department).

GENIP is a clearinghouse that coordinates the geography education initiatives of its member associations. Its mission is outreach on behalf of geography to educators and policy makers across the United States. GENIP is active in providing expertise and leadership in the development of policies related to geography education. Since the publication of Geography for Life, National Geography Standards 1994, GENIP's primary focus has been the promotion of Standards-based geography instruction as an integral part of every student's educational experience. (from, <http://genip.tamu.edu>).

As of 1999, GENIP conducts two projects, "AP Geography" and "Mission Geography". AP Geography is designed to prepare teachers for the implementation of the Advanced Placement geography exams for the year 2000-2001. It also involved a summer institute to prepare teachers through in-services. Additionally, the AP Geography Committee of GENIP prepared a "multi-task plan" for AP (from, <http://genip.tamu.edu/>). Mission Geography is "a collaboration and partnership between NASA and GENIP. The end result of this relationship will be three publications containing curriculum support materials that link NASA's missions and results with the National Geography Standards (taken from, <http://genip.tamu.edu>)". Again, we see the essential value placed upon collaborative activities with agencies that can provide support for the development of curriculum materials and for the promotion of the subject.

In addition to these current projects, GENIP has also conducted several other completed initiatives (although completed, they still are available). These include, *A GIS Workbook for High Schools* (with private sector support from ESRI, Inc.), a *1998 National GIS Institute for Geographic Educators*; the production and distribution of a *National Association of Secondary School Principals (NASSP) Geography Training Video* (all from , <http://genip.tamu.edu>).

According to information from GENIP (again, see: <http://genip.tamu.edu>), the key functions and administration of GENIP programs and activities includes the "dissemination and implementation of the content, skills, and perspectives of the National Geography Standards in both formal and informal education settings; the use of

geographic tools and technology (computer-based geographic information systems, remote sensing, spatial data available on CD-ROMs and the Internet) in education; the development of effective materials and programs in pre-service and in-service education; the development of partnerships with other stakeholder organisations; and public advocacy for geography education". Key to this discussion is the mention of stakeholder "partnerships" and "public advocacy". It is these two functions that give credence to the idea that GENIP is a horizontally integrating organisation.

Of particular note to the GENIP case is the heavy emphasis placed on disseminating publications. Examples of the publications developed with GENIP include, *K-6 Geography, Themes, Key Ideas, and Learning Opportunities* (1987), *7-12 Geography, Themes, Key Ideas, and Learning Opportunities* (1989) "five themes map" printed and distributed by the National Geographic Society; *Spaces and Places, A Geography Manual for Teachers* (1995, with assistance from Rand McNally).

Coupled with the NCGE's *Journal of Geography* and newsletter *Perspective*; the NGS Education Program's publication *Update* (distributed to all geography teachers who request it regardless of location); the AAG Geography Specialty Group's *Geography Education Listerv*; the ESRI *k-12 and Libraries Listerv* and program (see <http://www.esri.com>) and other more infrequent publications, a clear picture of very strong publications and communication opportunities for teachers and geographers develops.

However, the work of GENIP is not limited to the enormous listing of actions and publications above. In order to achieve its goals in a long term and sustainable manner, GENIP conducts outreach services that have included, "awareness sessions and workshops at the annual meetings of the associated geography organisations as well as Association for Supervision and Curriculum Development (ASCD), National Science Teachers Associations (NSTA), National Council for Social Studies (NCSS), regional NCSS affiliates, National Earth Science Teachers Association, the National Middle Schools Association, and the National Catholic Educators Association (taken from, <http://genip.tamu.edu>)".

GENIP also provides informational and consultative services to publishers of geography materials and others interested in geography education" and it was responsible for encouraging "the College Entrance Examination Board (CEEB) to include geography as a discrete subject area in its programs".

And to highlight the curriculum change function of GENIP, the organisation is also a member of the Association for Curriculum Reform and it "coordinates efforts to monitor the implementation of the National Geography Standards" through "strategies, partnerships, and venues to actively promote good geography as embodied in Geography for Life (from, <http://genip.tamu.edu>)." In order to fund all of the above, GENIP also coordinates a Grants Program to assist those wishing to develop new materials or projects. Once again, we see the importance of backing-up proactive initiatives and organisations with the financial means to complete the tasks.

GENIP not only symbolizes one of the first concrete and lasting actions towards association integration of status enhancing activities, it also points to a much stronger recognition by the academic geographers of the value and importance of supporting geography in schools. In an interview for the *Journal of Geography in Higher Education*, Salvatore Natoli (Director for Education Programs of the AAG), stated that GENIP was important for the AAG, and others, because it "mobilizes geographic associations to realize that they have a stake in the quality of pre-collegiate education, in elementary and secondary schools (Monk 1986, p. 128)."

In order to put the Guidelines into a more useful document for non-geography trained teachers, the "Five Themes" document was written in 1984 by the Joint Committee on Geographic Education of the National Council for Geographic Education (NCGE) and the Association of American Geographers (AAG) (see <http://www.nationalgeographic.com/education/themes.html>). The themes were later put into a brochure and poster that was sent to every school in the United States through funding from the National Geographic Society's Education Foundation and coordinated through GENIP.

A view of the central importance of GENIP and integrative actions.

Stoltman (1992b) gives a very clear description of why these developments occurred, and the impact they will have on the curriculum and teaching of geography at the pre-collegiate levels. "The need for strong professional, academic society support for geography in the schools is apparent. Such endorsement gives the clientele, in this case geography teachers and curriculum planners, the assurance that they are following guidelines which carry the academic credentials of the society or profession (Stoltman, 329)". He goes on to state that the networks between various organisations are creating opportunities where professional geographers "are becoming members of influential national, state and local committees responsible for making decisions about the school curriculum " (Stoltman 1992b, pp. 329-330). Not only does Stoltman suggest that curriculum change is one area of involvement for professional geographers, but he also gives evidence to suggest that the professional community is beginning to take up the challenge of becoming more involved in pre-collegiate geography. As he puts it, "the publication of articles in the *'Annals'* and *'The Professional Geographer'*, the two most important professional journals for geographers, addressing the improvement of pre-college geography signifies that the profession has a commitment to planning for the future of geography in the schools of the United States " (Stoltman 1992b, p. 330).

In a later publication, Stoltman (1996) would outline 10 significant developments in geographic education in the United States. Besides the already mentioned *Guidelines (GENIP)*, Gallup survey, and general educational publications (*A Nation at Risk*), Stoltman would include the establishment of the National Geographic Society Education Foundation as one of the most important developments. The NGS Education Foundation would help to fund the development of curriculum materials, videos, teacher inservices and a host of other initiatives to strengthen geographic education. The Foundation would also help to fund the Geography Education Project of the NGS and provide grants to state based Alliances. As this relates to professional geographers and developments in geographic curricula, Stoltman would go on to say that this "commitment and enthusiasm

will, with time, effect changes in curriculum materials, increase the expectations by citizens regarding geographic literacy, and assure the long term commitment by professional geographers to the renaissance in geography teaching underway in the United States (Stoltman 1992a, p. 275)".

It is interesting to juxtapose the optimism of Stoltman with the guarded caution of Schmudde, who, in 1986 (prior to the "renaissance of geography") stated,

The current revival of interest for geography by educators and the public must be met by the profession with a concomitant revival of intellectual concern for geography curricula and courses in the k-12 grades. My final concern is that, given the directions of academic research, there may be few geographers in the profession who will respond to this need (Schmudde 1988, p. 47)

Judging from the involvement of professional geographers outlined above, Schmudde's concerns were alleviated. In fact, several highly prominent geographers with highly visible positions responded to these concerns by calling for increased academic geographer involvement for the purpose of enhancing the public and educational profile of the subject and discipline. The most notable of these was George Demko, the Director of the Office of the Geographer within the US Department of State who called for academic teachers, practitioners, and business people with a concern for geography to work towards creating a highly visible and active subject (Demko, 1988). Perhaps a small measure of success is the fact that the US Department of State WWW page has a "learning section" for students devoted strictly to geography (see, <http://geography.state.gov/htmls/plugin.html>) that makes mention that it supports the National Geography Standards. Obviously this is a strong indication of success in terms of promoting geography amongst all levels of society - including government and politics.

The "Alliances" and increased public profile - the American model.

Although the above strongly supports the idea that professional geographers in the United States have become much more closely involved in geographic education and the overall process of curriculum change, there are several other important examples that show just how far the United States has come. Among these examples are; the development of geographic alliances, the corporate support for geography, and the National Geography Standards. The importance and development of geographic alliances is well documented, but perhaps the most significant publication to mention the Alliances is the National Council for the Social Studies Bulletin (no. 81); *Strengthening Geography in the Social Studies* (Natoli, 1988). It was in this document that many teachers began to realize the extent of the support for geographic education. The Alliance concept was also well documented in a special edition of the *Annals of the Association of American Geographers* in 1986. The concept was traced from its roots in California, and evidence was given on the extent to which it had begun to influence the course of curriculum development and change in that state (Salter, 1986, pp. 5-17 and 1992). Of note in that publication is the first article that discussed the need for geography within schools, written by the then President of the University of California (Gardner, 1986). Clearly then, the extent of integration of local and state geographers and geography teachers in California was an example and model for other states and the US as a whole.

Geographic Alliances are state-based organisations that join the efforts of geography teachers with geographers. In essence, they carry on the day to day activities of supporting geographic education. They also act as a conduit between the larger national organisations and the state; the place where control over education resides. This, directly and indirectly, allows national geography organisations to have an impact on local education matters. The success of the alliances can be measured by the fact that they are in every state, Puerto Rico, the District of Columbia, and Canada (through NGS support for the CCGE). Matching grants from the National Geographic Society Education Foundation supports alliances and their activities with grants of over three million dollars each year (see, <http://www.nationalgeographic.com/foundation/index.html>).

Between 1986 and the year the NGS Education Program 'took over' the alliance network, 1989, there was some debate about the value of the alliance model as a means for geographers to become more closely involved in school curriculum and teacher support. While the debate, and the responses to it were interesting and helped to shore up the concept and value of the alliances, the debate eventually became moot as events and funding overtook personal and intellectual differences. The alliances are presently so well funded; supported by university geography departments; international in scope and recognition; and successful in terms of teacher acceptance and involvement that it would be impossible to conceive of their demise in the near or distant future.

As has previously been discussed, 1988 was a watershed year in the UK; and the same period was also very significant in Australia. This is also true for the United States because 1988 saw a Gallup survey conducted during the NGS centennial year. This survey measured the level of basic, factual knowledge among students in schools and universities in a number of nations including the US. The Gallup survey was sponsored by National Geographic, and it was widely reported by the media (Newsweek, August 8, 1988; The Economist, July 30th, 1988). The survey was given to students 18 years and older (10,820 of them) in nine countries; including Canada and the UK. As we shall see during the analysis of the Canadian case study, such surveys become critical tools for identifying status issues related to the concept of 'geographic literacy'.

Interestingly, the aftermath of the survey and the fallout of the media coverage are important to look at in more detail. In the US, the poor showing created a near national crisis. As a result, and through the direct personal involvement of some congressional politicians, the National Geographic Society, the AAG and NCGE, a national proclamation was developed and signed by the then US President, Ronald Reagan in 1987 establishing a Geography Awareness Week. This single action created a 'snowball effect' that had international implications. From this developed a more focused fund raising initiative by the NGS; the establishment of the Geography Education Foundation which created a more secure footing for state level "Alliances"; and a national

"Geography Bee", to name but a few. Combined with the previously mentioned GENIP program and the development of state and local based "alliance" initiatives in California in the early 1980s, a clear picture of a highly active - and reactive - geography education community in the US develops.

Because of the media attention combined with public profile events like the Geography Bee and the distribution of free classroom materials to every school (globes, maps and atlases, as well as newsletters), the NGS was able to find more funds and raise money from the corporate sector. This was combined with a clear political tactic and strategy to maintain the public's focus on the value (in utilitarian terms) of enhancing geographic literacy. The model and means to deliver the programs of support was the established alliances. The Geography Education Foundation has now extended its integration with other associations to maintain the status of geography (NGS, <http://www.nationalgeographic.com/education/index.html>). This integration has taken place with GENIP, the Education Committee of the AAG, and more broadly-based educational groups like the National Education Association and the National Council for Social Studies. The strategy seems to be one of placing geographers and geographic associations at the forefront of all levels of discussions related to both the school subject and discipline of geography, as well as within the confines of broadly based educational discussions. Such political integration at so many levels is without precedent in comparative terms with the UK and Australia - although those two jurisdictions are not without some proportional success.

The support for geography education can also be seen as significantly different in the United States. Several corporations, led by the National Geographic Society, have developed unique ways to contribute to enhancing geographic education. American Express developed a geography competition under the supervision and guidance of the AAG; later this competition was extended into Canada with the support of the Canadian Association of Geographers. National Geographic, with support from Amtrak, Citibank, and others, developed the Geography Bee, which has become an international event mirrored in many nations, including Australia, the UK, Russia and Canada, under the banner of the "International Geography Olympiad" (Walford and Haggett, 1995). And

Rand McNally helped to establish a survey of geography education, and a fund for speakers at major conferences (Rand McNally, 1990). Even ABC Television has created a position for a geography editor on its morning news program. Geography has become so popular and well supported in large part due to the development by the Congress of the United States of a National Geography Awareness Week - which has also been mirrored in the UK, Australia, and Canada, although the Canadian event is combined with the US.

Currently, the NGS Education Program has established additional projects supporting geographic education and research with partnerships from the private sector (see, <http://www.nationalgeographic.com/education/partners.html>). Such extensions of the proactive nature of the original developments associated with GENIP, the Alliances and NGS, is proof positive that the strategy to use the geography Education Foundation as a leverage tool to raise more funds and active involvement has worked. Of interest in terms of recent technological developments in geography is the development of a GIS Day as part of the 1999 Geography Awareness Week in November. This particular action is being supported by ESRI Inc, the AAG, and the NGS (see, <http://www.aag.org/Education/Gisday.html>).

Throughout these developments and activities, the NCGE has been extremely active in developing materials and support mechanisms for practicing teachers and geographers wishing to enhance their geography teaching abilities. Recently, the NCGE conducted a review of its memberships that showed a fairly equal split between the k-12 (26.57%) and higher education sectors (23.44 %). The report also found that the total numbers of members was over 2,500, with under 100 from outside the United States.

(see, <http://www.ncge.org/membershipstart.html>). This is a fairly significant number, but well under the 11,000 reported by the GA in the UK. Part of the reason why fewer people belong to the NCGE may be due to the very large membership of the NGS (well into the millions) and the fact that local support through the Alliance network has become more the normal way for teachers to gain support. Such shifting memberships should be of concern to all associations, and perhaps associations that seek to work together towards a

common cause may want to consider cooperative and/or joint memberships to boost each other.

What is important to note also is that the NCGE has established a foundation of its own (the 21stCentury Fund) that will help secure the association's ability to support geography teachers and geographic education for the next century (see, <http://www.ncge.org>). There is a strong indication that the financial security of associations is critical to the ability to maintain the interest group lobby status and to offset the high costs of providing support to a large number of teachers and geography classrooms. Because of its size, the United States was obviously more able to find the means to achieve such financial goals.

The Move towards National Standards for Geography in the US.

All of the activities discussed above, and more, helped to create a climate whereby geography would become included, and its status and support insured, as one of the core subjects in an educational movement to create national standards of excellence for education. As we have seen in the cases of Australia and the UK, such trends towards national or standardised curriculum are significant challenges and opportunities for geographic education to achieve an even higher level of status and sustainability.

In 1994, the *National Standards for Geography, geography for life* were published (NGS, 1994; see: <http://www.nationalgeographic.com/education/standards.html>). The Standards differ from the National Curriculum of the UK in that they are suggestions and measurable goals for geography teachers to reach - they are voluntary as opposed to the statutory UK curriculum. Nevertheless, they are significant in that they represent years of joint effort by all geographical associations, as well as other educational bodies, corporations and governments, to reach a consensus on the shape, direction, and (in part) the content that geography education should take in the United States. At present, the impact of the Standards can be measured by the current plans to add geography to the list of subjects for the Advanced Placement Tests used (although not mandatory for

placement) for university entrance in the United States (CEEB, College Entrance Examination Board, see: [http:// www.collegeboard.org](http://www.collegeboard.org) news archives for March 7th, 1997).

When discussing the standards project in the United States, it is important to emphasize the critical distinction between the voluntary US Standards and the Statutory UK National Curriculum. However, even though the US standards still represent a significant contribution to geographic education in and outside the US. Additionally, and important for this analysis, "The National Geography Standards were produced under the sponsorship of the four major geography organisations, the American Geographical Society, the Association of American Geographers, the National Council for Geographic Education, and the National Geographic Society. Thus they are a statement not only for all the people interested in geography but also for all the major players in geography education (taken from, <http://www.nationalgeographic.com/education/standards.html>)."

Another significant difference with respect to the United States is the public profile which geography has achieved, as well as the public debate about education that has taken place in the USA. In large part, the experience in the UK and Australia was that the educational authorities (government and school boards and parents) deemed that there was a need to change the curriculum. At that point, geographical associations were consulted, or put forward ideas, about the direction or specific changes needed, and they were very active in response to the request for input. The case in the United States is unique in that the battle cry came from public, government and business at the same time as geographers were attempting to strengthen geography education. Most of the initiatives that are having an impact on geography curricula started in the geographic community, rather than the educational community.

When one compares these situations, albeit with slight differences, with the situation in Canada, there is a very large gap between what is needed and what has been done. In many ways, as we shall see, Canada is perhaps a decade behind in the changes needed to have significant impact on geographic curricula. There is, however, much room for optimism. This optimism is based largely upon the belief that the essential ingredients

for successful change of geographic education and curricula in Canada are in place. However, what is needed now is a more reasoned approach to strengthening geography in Canadian schools. This reasoned approach should be based upon modelling the successful efforts in the nations analysed above, as well as the avoidance of their mistakes.

The US Higher Education Community and Geographic Education

It is useful to note as well that, from the perspective of higher education, geography has shown much in the way of development and increased status/visibility due to "spin-offs" from the renewal in school level geographic education. As proof of that, one need only look at several projects recently established in the higher education sector. All these projects link with schools and seek active involvement with academics, business and teachers concerned with geographic education. At the University of Colorado Department of Geography there is hosted a WWW site for the Geography Education Speciality Group of the AAG. From that site, the group distributes publications and project information. As well, the group hosts an Internet 'listserv' for on-line discussion and news distribution (<http://www.colorado.edu/geography/COGA/geoed/>).

Many of the projects listed at the Colorado site are supported by grants from the National Science Foundation (NSF). This is instructive because the NSF has been instrumental in supporting and funding geography projects in the higher education community. Not only are the Colorado projects supported, but also the Virtual Geography Department at the University of Texas at Austin (<http://www.utexas.edu/depts/grg/virtdept/contents.html>). This site distributes curriculum materials and lessons for higher education geography instructors - and it is just as useful for high school teachers. There have even been calls for more linkages with the community college geographers through such programs as GENIP and the Alliances (Heath, 1996).

Additionally, there is the National Mapping Science Committee, which is a committee under the National Academy of Science/National Research Council that seeks to establish

mapping and GIS in schools and universities; an example of that committee's proactive work is found in the creation of the document *The Future of Spatial Data and Society* (Mapping Science Committee, Board on Earth Sciences and Resources, 1997). Within that non-profit educational agency was developed, under the auspices of the Commission on Geosciences, Environment, and Resources Committee on Geography, the publication *Rediscovering Geography, New Relevance for Science and Society* (Committee on Geography, 1997). As another example of the level of horizontal integration, this publication was cooperatively developed and funded by, The Association of American Geographers, Environmental Systems Research Institute, Bureau of the Census, U.S. Department of Transportation, U.S. Environmental Protection Agency, National Geographic Society, National Science Foundation, U.S. Geological Survey, and the National Research Council. These groups encompass the full range of academic, non-profit, governmental, and business organisations, and their activity proves the extent to which integration within this interest group sector exists. Moreover, it is conceivable that such developments could have only taken place as a result of the aforementioned history and development of geographic education support mechanisms in the United States.

In terms of vertical integration, perhaps the most senior level of that verticality is the U.S. National Committee for the International Geographical Union (USNC/IGU). The USNC/IGU mandate includes the following: "promotes the advancement of geography in the United States and throughout the world; facilitates participation of U.S. geographers in the activities of the International Geographical Union (IGU) of the International Council of Scientific Unions (ICSU) in order to strengthen U.S. geography as a contributor to the international scientific community, and informs the U.S. scientific community of geographic activities carried out elsewhere in the World; Serves as the official U.S. liaison to the International Geographical Union (IGU); Encourages and facilitates participation of U.S. geographers in the IGU; Continues long-standing ties between the National Research Council (NRC) and the U.S. geography community; and Provides advice to the President of the National Academy of Sciences (NAS) on all matters pertaining to geography, emphasising advice to the NAS Foreign Secretary on matters concerning international organisations and programs (USNC/IGU see,

<http://www4.nas.edu/cger/besr.nsf>)." Again, it should be recalled that a number of members involved in these high level associations are also members of the NCGE, AAG, NGS and AGS. There is a high degree of horizontal 'cross fertilization'; something that the USNC/IGU mandate promotes. This exemplifies how peak organisations work - they seek to bring that beneath them on the vertical into focus and represented among horizontal linkages.

The US case summarized.

The case of geographic education in the United States, and the role(s) played by the various geographically focused associations, is important to recognize in this analysis as having the most focused and clearly enunciated effort towards the integration of interest groups towards common goals. The key elements that the US case suggests should be modeled by similar associations and peak organisations are (with examples),

- Co-ordination through a lead agency of many similar, collaborative activities (GENIP),
- the secure funding of any activities (NSG and NCGE foundations; GENIP and NGS grant programs),
- an extensive and long tradition of publishing and disseminating materials to teachers (Journal of geography, Update; Geography for Life; "Five Themes"),
- public awareness and political activities (Geography Awareness Week),
- support from the private sector (ESRI and the k-12-libraries program; Rand McNally; American Express; Citibank)
- advisory and consultative services (AP Geography) and,
- the flexibility to effectively add new programs and services as needs and technology changes (GIS Day; www sites; listervs).

Most importantly, from the integrative standpoint, it is essential that all the actions across areas of concern are communicated and represent the vertical networks of associations so that, from primary to senior high school, issues and needs are seen as being equal to the

needs of college, university and applied geography. By following such actions in a combined manner through open and co-ordinated action within the policy network of geographic education, the United States has been maintain a focus on reversing the 1988 Gallup survey results – although no additional survey has been conducted, so no evidence exists to measure current situations to past. The associations and organisations discussed above have raised the public profile and status of geography to a point where it would now be most difficult, if nearly impossible, to relegate geography to the backseat of the curricular options available for schools. This has been done in just one decade. One can only compare such a period of time, and successful achievement, with the 'moon shot speech' and challenge put forth by former US President Kennedy. It is as if someone had said that (to paraphrase that Kennedy speech) ' by the end of the next decade, the United States will secure the sustainability and status of geographic education'.

As we have seen with the case of Australia and the UK, such national level support from lead agencies that are highly integrated horizontally within the academic disciplines (the NAS, IGU, AAG, GENIP in the US, and the AAS in Australia, and COBRIG in the UK) is critical for the success and status of the discipline. Furthermore, when such activity is simultaneously directed towards schools through vertical associations, the subject of geography within the various curricula of those nations has seen enhancement and increased status. As has already been stated, through discussions of Goodson and interest group research, such status is the most essential element in determining the successful integration of geography within the overall school curriculum. For geography as a school subject to exist within the school programs, and for it to be enhanced and maintain a critical level of positive status, geographers and geography teachers, (through associations), must find ways to link their activities and direct their actions towards improved public perception and profile of geography as a valuable means for learning and research. If this is true, then such a theory must be applied to the Canadian situation. As we shall see, Canada is the newcomer to this geographic education, status-enhancing model.

THE CANADIAN CASE

The Context of Canadian Geographic Education.

The following comments on geography interest groups in Canada is introductory to a later discussion and analysis which compares the Canadian situation with the three other cases. Relatively little has been written about geographic education in Canada, and very little in the professional literature of geographers in Canada about the need for professional involvement in geographic education. This situation is in stark contrast to the plethora of material in Australia, the United States, and the United Kingdom. It should be noted that the major works written about Canadian geographic education have been placed in American or British professional geography and educational journals (Hill, 1989 and 1992; Wolforth, 1986; Fox, 1988; Thomas, 1991 and 1992). Furthermore, the two most significant works on geographic education written in the last ten years, from an international or comparative view, did not contain any contributions or mention of the Canadian situation (Haubrich, 1987; Naish, 1992).

One publication of note (*Canadian Geographical Education*) was produced in 1980 and published by the CAG, with the input of academic geographers from across Canada (Wolforth et al, 1980). This work, an historical review of the development of the school subject and academic discipline in Canada, also included much discussion of methods for geography. However, the text was produced after the heyday of the quantitative revolution, a period that had placed academic geographers and geography teachers on unequal levels, which had the effect of creating a text that could have a less significant impact on school geography. The former tended during that time, to speak down to educators in a 'we have the answers' tone. Regardless of this publication's lack of direct application to current geographic education issues and concerns, it still remains the only substantive effort to publish research material related to and based upon the Canadian experience in geographic education. Moreover, it is curious to note that there are very few copies of this work available in Canadian libraries, and citations from the text are few and far between. The time is long overdue for another, perhaps more appropriate or timely, publication.

Geographic education has experienced pressures for change in Canada as it has elsewhere. It was gaining a renewed focus from the educational communities in the United States, Australia and the United Kingdom, as there were also geographers, but fewer geography teachers, calling for a similar revitalization in Canada.

In comparing Canada to the situation elsewhere, Fincher stated in 1985 that,

Various strategies are being pursued in the United States to improve the public profile of the contemporary discipline of geography. I report these strategies because, if pursued in Canada, they might also have some impact on the perceptions held of our discipline by the Canadian public (including students and educational administrators) (p.4)

For our purposes here, it is important to note what was thought to be possible for the status of geography by mirroring the strategies outside Canada that were largely based on interest groups. In 1985, Fincher was calling for, in essence, action on the part of professional geographers to see a renewal of the discipline in the schools similar to that which was taking place in the United States and the United Kingdom. This 'call to arms' was not taken seriously for many years. Arthur Limbird stated, in an editorial for the Canadian Association of Geographers *Operational Geographer* in 1986 that "in order to improve our chances for survival we should look to future students by gaining support and interest in the secondary schools across the country"(Limbird 1986. p.5). He concludes with a similar call to arms for geographers by suggesting that geographers must have a mission so that "a new, vital geography [can] survive in the secondary schools and feed our colleges and universities and keep our geography departments alive and well."(Limbird 1986, p.5).

Wolforth (1983) contributed a chapter on the development of geographic education in Canada. However, in his chapter, and in subsequent works by both Wolforth (1986) and Hill (1989, 1992) the only examples of 'geographic education' were from the provinces of Ontario and Quebec. In 1983, Wolforth also made reference to the fact that Canadian geographic education had not received the attention that it had in the United Kingdom;

evidenced by the lack of any well-funded and publicized geography projects in schools. In 1986, in the *Annals of the AAG*, Wolforth suggested that such a lack of geographically focused projects was due to a lack of "enthusiasm" on the part of the academic geographers (Wolforth 1996, p. 23). In the same article, Wolforth goes on to state that geography in Canadian schools has not been the same advanced as in other nations:

There is no organization in Canada comparable to the British Schools Council from which such excellent projects as Geography for the Young School Leaver, Geography 14-18, and Geography 16-19 have originated. The only comparable effort has been in the work of the Canadian Studies Foundation, but here the intention was not to produce better geography but a more sensitive appreciation of wider Canadian concerns throughout the school curriculum. (1986, p.23)

Wolforth continues by suggesting the lack of professional integration with change in geographic education in Canada was due, in part, to the lack of a peak-level and national organisation seeking to influence curriculum development. Because of that, the work of altering or adapting geographic education has been left up to the bureaucrats, teachers and writers who may, or may not, have understanding of the nature and value of geography (Wolforth 1986, p.23). Noticeably absent in Wolforth's work was the role or impact of professional geographers. In the writings of others dealing with developments in other nations, the role of professional geographers has been, as previous sections have shown, given ample attention. The paucity of any reference to Canada was continued in two important papers on geographic education by the American scholar A. David Hill in 1989 and 1992. In 1989, the only mention of Canada was attributed to Wolforth (1986) when Hill stated that Canada "has no nation-wide organisation of geographic educators, but the Canadian Association of Geographers has long-established links with the schools, and the most populous provinces have strong geography teachers' associations (Hill 1989, p.589)." In 1992, he provided only one line devoted to the Canadian situation that suggested that one of the "most impressive school curriculum documents comes from Canada (Ontario Ministry of Education, 1988) (Hill 1989, p.238)."

Hill's comments merit two observations. First, the titles of his articles would lead most readers to believe that he would discuss the situation in North America. Yet, besides the extremely brief mention of Canada, he ignored Mexico, focusing instead on the growing importance of geography in the schools of the United States. Second, his mention of Wolforth (1986) seems rather misplaced and might be seen as an incorrect evaluation of the role of professional geographers in Canadian geographic education. Wolforth had in fact called for more organised involvement by professional geographers that would extend beyond local representations to educational bureaucracies, creating curricular support materials, and helping provide some in-services for teachers. During the period of time Hill was making reference to, there still had not been a national-level body developed to focus on school geography. Hill mistook the encouraging tone of Wolforth's remarks to mean that geographers were active in the manner associated with horizontally based interest groups. It should also be recalled that much of the analysis and information supporting of both Hill and Wolforth was prior to the Baine study (1991). That study more thoroughly reviewed the status of geography in all provinces, as opposed to the Hill and Wolforth research that was almost solely based upon one province, Ontario. There are, and have been, many individual geographers involved in promoting geographic education AND curriculum in geography in Canada. However, to suggest that the professional body (prior to 1990-1991) of the Canadian Association of Geographers was actively involved in geographic education in schools would be incorrect.

In Ontario, as Hill and Wolforth pointed out, the professional community and teachers were actively working together - sometimes with joint efforts and success, sometimes not. The Ontario case was also unique in that there was a pre-existing geography education association, the Ontario Association for Geographic and Environmental Education (OAGEE). However, the constitution of Canada helps to explain why national level associations for geographic education did not form as widely as elsewhere. Education in Canada is within the jurisdiction of provincial governments; a power jealously guarded. Local geography teachers and geographers within some provinces have sometimes tried to develop stronger linkages and vertically integrated associations for the enhancement of geographic education. Such organisation often took the form of

committees within regional divisions of the CAG, or geographers working within broader social studies associations in order to make the case for geography as a discrete subject. During times of curricular review and change, some geographers have become personally involved. However, prior to the establishment of the CCGE in 1993, there was no national-level body that could take action across the provinces, a situation widely criticised (Baine, 1991; Thomas, 1990,1991,1992; Fox, 1988).

The development of the Canadian Council for Geographic Education

Based upon this criticism of the status quo, and the previously mentioned call to arms in the mid-1980s, several events occurred that changed the nature of geographic education associations and their activities in Canada. In 1990 the author was asked to serve on the Geography Education Committee of the CAG at a time when professional geographers were seeing the need to study the situation in Canadian schools and to suggest ways to become more closely involved with it. In 1991, the CAG Education Committee published, in the *Operational Geographer*, an article outlining the status of geography in Canadian schools, based upon an analysis of the provincial curriculums (Baine, 1991). The results showed a great deal of variation in the level, quality and status of geography curricula throughout Canada. As a result of this study, and the subsequent presentations and debates at annual meetings of the CAG, this author proposed in 1991, to both the CAG and RCGS, the formal establishment of the Canadian Council on Geographic Education (CCGE).

For the purposes of this paper, it is important to note the rationale behind the proposal for the CCGE. The concept was nothing new. The author felt that the CCGE should be like the Alliances in the United States. It would be a joint effort of equals; namely the CAG and the Royal Canadian Geographical Society, to create a new independent body that would coordinate actions to support geographic education in every province and region of Canada. In essence, this was to be a Canadian version of the structures represented by the Geographical Association (UK), the National Council for Geographic Education (USA) and the Australian Geography Teachers Association. Any support or funding

would be given as a one time transfer into a geography education foundation for Canada (based upon the US NGS model) and any development of a peak level organisation would then occur based upon the various associations being equal partners. In this way there would be an opportunity to bring together the CAG, CCGE, and RCGS with other organisations to seek ways to improve the overall profile and sustainability of geography at all levels. What actually came to pass in the creation of the CCGE, was significantly different - as it was also from practice in other countries. The reason for the CCGE not being developed as proposed was essentially due to an immediate availability of funding through the US 'Alliance' movement within the National Geographic Society's Education Program. Had a similar amount of support been available within Canada that could be matched by other geographic associations besides the RCGS, then it is possible the CCGE may have taken shape in a different manner.

The CCGE, which was officially launched in 1993 at the Annual Meeting of the National Council for Geographic Education (held in Halifax, NS), became a joint effort of the National Geographic Society and the Royal Canadian Geographical Society. The Canadian Association of Geographers, and its Education Committee, were excluded from the development of the CCGE, and the role of the CAG within the CCGE was eventually limited to a representative from the CAG Education Committee being given a seat at the CCGE board level. At present, the CCGE is officially called the Education Committee of the RCGS, in stark contrast to the COBRIG model and the NGS in Australia. These other organisations sought to join the efforts of professional geographers and geography teachers to further geographic education, and curriculum changes, in a systematic manner. Each of the geography education associations that came under the peak organisations in the UK and Australia were stand-alone associations in their own right prior to the establishment of the peak organisation. Also, the CCGE is at present jointly funded by the NGS and RCGS, and it is considered to be one of the US Alliances under the NGS Education Program that helps offset costs for the CCGE activities. However, the current situation is also very fluid. The CCGE has extended its reach to include among its members, and its executive, geographers, geography teachers and educationalists. It has also made more formal linkages with the CAG Education

Committee and the Canadian representative to the IGU. Much of this reorganisation of the CCGE came about because of a few key individual geographers who persistently made the case for broader representation.

The current situation in Canada (1993-1999)

Several developments between 1993 and 1999 have changed both the nature of geographic education associations in Canada and the potential to develop more linkages. The CAG, through its Education Committee, has taken a number of steps to ensure that it maintains close links to the CCGE and that it maintains a higher profile among geographers and geography teachers. The CAG helped support, through judging, the American Express Geography Competition in Canada between 1991 and 1994. At the present time that competition is no longer in place, but it has found a new home in the CCGE-RCGS senior geography contest. Again, the CAG Education Committee has become more closely involved because of concerted efforts on the part of the Committee chairs who have taken the lead in making certain that linkages are developed between the various associations even in the absence of a formal peak organisation.

The CCGE also helped establish the Great Canadian Geography Challenge, which is akin to the NGS Geography Bee. The CAG helps with the judging and setting of questions, and the winners are able to compete in the International Geography Olympiad. At present, the CAG Education Committee is working to re-invigorate the debate about the place of geography in Canadian schools and to help support and contribute to studies regarding the potential for national curricular standards in geographic education (all from CAG Education Committee, personal correspondence.).

Of critical importance to note is that in 1998, the CCGE helped support a National Symposium on Geographic Education. This event was without precedent in Canada and probably went a long way to offset previous comment by many critics (Thomas, 1992; Semple & Boxall, 1994). Key to that meeting was a call to establish national standards for geography education in Canadian schools. Adding to this move towards standards are

recent efforts to create common learning outcomes, which are not subject specific, for students within sub-national groupings of provinces in eastern and western Canada. This regional approach may be counter to the efforts to create more national, subject specific, standards. Such subject specific approaches have necessitated heavy association involvement in the other three cases previously reviewed in this study, and have helped to give geographic education a more secure place in those nations educational programs. It is most likely that, based upon the experience of the GA in the UK, GENIP in the US, and the NGS in Australia, such major undertakings will require substantial levels of inter-association cooperation - even to the point of establishing new, peak-level organisations. This is, as has been shown by the previous cases, best accomplished through encouraging strong vertical and horizontal networks coordinated through peak level organisations.

As mentioned earlier, provincial control over education is a power that is 'jealously guarded'. And it may be the case that the problem of provincial control over educational matters in Canada could be overcome through a national-level body, in this case focused on geography, that seeks to bring together regional and sub-regional groups.

Legal control may still reside with the individual provincial governments, but a peak organisation may be able to advance the case for geography because of a broad national representation through an executive and committees with such representation. The end result could be a peak organisation that provincial governments view as the 'experts' in geographic education; as well as being viewed as the customers and researchers! Ironically, such an organisation may actually be able to overcome some political constraints while being politically sensitive to regional and local matters.

These actions are most certainly placing geographic education in Canada at a point that could see a major resurgence and increased public profile for the school subject *and* academic discipline. Through such actions, and with the organised cooperation of a larger variety of related associations within some manner of peak organisation, geographic education in Canada may well gain status and a greater degree of sustainability. Any geographic association in Canada seeking to change geography in schools would be well

advised to seek out a clear understanding of the methods used in other nations that have seen similar efforts on the part of geographers and geography teachers. Specifically, the CCGE should seek to either establish itself as an independent association, or the CCGE in cooperation with a variety of like-minded groups should seek to establish a peak-level organisation which brings together all associations concerned with geographic education in Canada. Regardless of which approach is take, or which mixture of approaches based upon the previous case studies, one critical factor for success is adequate funding. Beyond the money issue, there must be a sufficient number of member – drawn from all regions - to carry out voluntary actions that will be time and energy intensive.

ANALYSIS AND DISCUSSION

Some ideas relating to geographic education in Canada, as stated in the first part of the Canadian case study, are best made evident through orderly comparisons with the other nations reviewed. Nevertheless, it should be noted at the outset of this analysis that the Canadian situation is in the early stages of development. Moreover, the organisational structures of associations concerned with geographic education in Canada are fluid in terms of recent developments, such as changes in membership, as outlined in the previous chapter reviewing the Canadian case.

There are numerous similarities between the various examples cited in this study that suggest a generalized model of best practice for geographic education associations. To make these similarities clearer, a topical approach is used hereafter for items such as publishing, level of horizontal integration, age of associations and length of history of initiatives, and overall promotional and awareness-raising activities. Regardless of the number of levels by which a comparison can be made, the various broad actions outlined must also be considered as interrelated. No one activity can ensure an association's success in enhancing geographic education. It is the interrelationship of a variety of such items, however, that is crucial to enhancing the status of geographic education.

A. Publishing:

The US, UK, and Australia have long and very strong traditions of publishing journals, newsletters and curricular materials in geography. Furthermore, all three utilize larger academic organisations and societies to publish more substantive documents, monographs and irregular conference proceedings on the viability and value of geography as both a school subject and academic discipline. Examples of these actions include, the US NAS *Rediscovering Geography* and the RGS-IBG publications in support of curriculum matters arising from the National Curriculum (see <http://www.rgs.org>). In Australia, there have been a number of equally important publications. There are also publications of an international nature that have their roots in the three nations above, most notably the *Journal of Geography in Higher Education* and the *International Journal of Research in Geographical and Environmental Education*. Publications such as

these allow geographers and geography teachers to relate issues and developments across national boundaries.

In Canada, the only publication of note is the *Canadian Council for Geographic Education Newsletter*. However, the CCGE also distributes material from the US Alliance program through support from the NGS. There is also a re-distribution of materials and reprints of *Canadian Geographic*, the publication of the Royal Canadian Geographical Society. Again, the lack of a substantive academic or educationally-focused publication where teachers and geographers alike can communicate issues, ideas and research is a feature of the Canadian situation. Even the major geography journal of the CAG, the *Canadian Geographer*, does not publish educational articles of note. As mentioned earlier, to find research papers discussing Canadian geographic education, one must search non-Canadian publications; and even then the amount of Canadian material will not be that large. Overall, the publishing record is rather scarce in terms of material about the Canadian situation with regard to geographic education.

B. Internet:

All four case studies have shown a willingness on the part of the various associations to utilize the latest means of communication and distribution of information. Associations exist primarily to communicate with members, and the development of WWW sites and listservs is critical in this regard. Canada has also begun to develop such actions - the CCGE has a www page and a listerv. However, there is a need to expand the reach of those actions as well as take advantage of the convergence between the Internet and GIS as they are both essentially electronic means of communication.

Moreover, one should recall that the broader societal availability of the Internet is a fairly new event - the WWW was only made public in late 1992. Even so, there has developed a unique shift in society as a whole where one can no longer see an advertisement or other mode of publicity without seeing a www source cited. In this regard, it becomes

crucial for Canadian geographic education associations to make full use such technologies that can support promotional and communication activities.

C. GIS:

GIS is probably the most influential and talked about development in geography and geographic education today. What is important to note is that the peak organisations in the US, UK, and Australia (GENIP, COBRIG and NGSP), have taken advantage of developing very strong links with the GIS and mapping community and include representatives of the main GIS and mapping associations. This has the effect of broadening horizontal linkages because those GIS and mapping associations have very extensive vertical linkages with planners, cartographers, engineers, and geographic researchers. Of concern in the Canadian situation, and related to publications, is that the one publication in Canada - *the Operational Geographer* - which could bridge the gap between the GIS practitioner and applied geographers with teachers, has ceased publication.

D. Membership, Association age and length of history of initiatives:

Membership numbers, and the degree to which that membership is drawn from a wide array of professional and teaching geographers, is very important as a measure of vertical integration of the interest group. With respect to the four nations, three have extensive overlap in memberships between professional geographers, teachers, educationalists, and the private and public sectors. According to figures from the various associations, memberships vary from 11,000 for the GA to several millions for the NGS. The NCGE has over 2500, while the professional geography associations in Australia, the UK and the US have memberships in the thousands. In Canada the situation is less clear because the CCGE does not require membership dues. It does have a mailing list, but almost anyone can sign onto that list. Membership dues are essential for more than just fund raising; they also provide a means of securing credibility for the interest group in those situations when it has to lobby governments or educational administrations.

The age of an association can have a significant impact on the status of that group. The US, UK and Australia have organisations over one hundred years old. In Canada, the age of geography associations is under a century, and in the case of the CCGE, under a decade. Even peak organisations in the US, Australia and the UK are older than the CCGE. What this means is that the length of time, and experience gained from, conducting initiatives is much longer in the non-Canadian areas. This has also led to their being more familiar to external agencies and interest groups. Again, age, number of years active, and the extent of membership are factors that impact upon credibility and status. The research, by others, as well as within this thesis, clearly indicates that without status or credibility an association cannot demand a place in the process of curriculum change.

E. Research:

Related to the record of publications and the age of an association is its ability to conduct and communicate research in the field of geographic education. In the US, UK and Australia, both geography and geographic education associations have the means to communicate and carry out research. This is made possible through funding from outside agencies for specific projects or special publications (such as NSF support for geography research in the US) as well as internal, association sponsored foundations (such as the NGS Education Foundation). Additionally, the results of research are able to be disseminated widely through existing publications. By providing for a solid foundation for research to be conducted, and the results to be made widely known the associations in those three nations have been able to create a perception (and a reality) that geographic education is a valuable academic and practical pursuit.

In Canada this is more problematic due to a very significant decrease in the number of academic geographers within the university sector who might otherwise have a concern for geographic education. Moreover, the quantity of geographic education research in

Canada is very sparse. Granting opportunities for research tend to be attractive to the applied sciences, including physical geography. There also seems to be a general trend towards applied technological research - such as relates to telecommunications and computing. Also, one must consider that professional geographers doing research in geographic education are less likely to have such research viewed as 'peer reviewed' or appropriate for tenure and promotion. The cumulative impact of these research issues is a lack of opportunity and support for research about, and within, the geographic education network in Canada.

F. Funding:

The US geographic education community helped to establish a foundation, through the National Geographic Society, to support the activities of its geography programs for schools. The NCGE has also established a foundation similar to NGS. Moreover, GENIP, through contributions from its lead associations and the private sector, has a granting programs for research and development of curricular materials supporting geography. In the US there has also been funding from the NSF and NAS towards creating and supporting the work of various geography related committees. In the UK, there has been a recognition that similar and more permanent means of support must be found. However, the UK situation is unique because the GA has 11,000 members. This size of association means that it is possible to manage such a source of revenue to help fund educational initiatives. The case with regard to Australia is more in keeping with the UK situation. Memberships and subscriptions to publications, as well as sales of monographs, mean that the various associations are in a position to divert funds for educational projects.

In Canada, support for the CCGE activities is gained through matching grants from the NGS and the RCGS. The CAG membership dues help offset costs of that association, but all indications have been that membership in that organisation has been decreasing, which means that the financial ability of the professional geography association in

Canada to support education - at any level - becomes difficult. Because of these situations, and the lack of a revenue stream from membership dues and sales of publications, the overall funding situation for geographic education in Canada can only be described as tenuous. Canada must find a more effective means to support geographic education beyond yearly grants.

G. Peak organisations:

As we have seen in the US, UK and Australian cases, peak level organisations developed to fill a need to establish a broader base of support that could more greatly influence, promote and enhance geographic education. The National Geography Support Group (NGSG) of Australia includes the vertically integrated associations of the Institute of Australian Geographers, Royal Geographical Society of Australasia, Institute of Australian Cartographers, Australian Geography Teachers Association, International Geographical Union, Australian Environmental Education Association, and the Australian Academy of Sciences National Committee on Geography. Such a peak organisation in Australia creates a visible entity that teachers and geographers can look towards for promotion and support of the subject, and it is an example of the need to find strong vertical associations to partner in establishing horizontal networks. The US also has such an organisation in the Geography Education National Implementation Project (GENIP). GENIP is a joint project of the National Council for Geographic Education, National Geographic Society, American Geographical Society, and the Association of American Geographers. GENIP also now cooperates more extensively with the NAS Committee on Geography and the UCGIS, and has shown how funding and private sector collaboration is a positive addition to the peak organisations. In the UK, the Council for British Geography (COBRIG) includes the Institute of British Geographers, Royal Geographical Society, Geographical Association, Scottish Geography Teachers Association, Ordnance Survey, Society of Cartographers and other regional and national organisations. The UK model exemplifies how outreach and cooperation should include national and regional level organisations.

The case in Canada is quite different, and there is currently no national level peak organisation that bridges the gap between all levels of geography and geographic education. The CCGE does include membership from other societies, but it is also considered a committee of the RCGS, and therefore lacks the inter-associational or horizontal integration that is needed to be considered a peak level association.

H. Involvement of major national academic associations:

As we have seen in the US and Australia, major academic associations that represent the very broad interests of academic disciplines in general, have taken an active role in coordinating major initiatives toward enhancing the status of geography and geographic education in their respective nations. The NAS in the US, and the AAS in Australia both published materials that do much to secure a highly visible place for geography. In Canada, there is no similar academic society that could carry on such support. The two national research bodies, SSHRC and NSERC, are research granting agencies only, while the most prominent academic society (Royal Society of Canada) does not normally conduct research or publish in such specific areas as school subject issues. However, in Canada, there does exist a peak organisation, the Canadian Geoscience Council, which has geography representation (through the CAG) and does make public pronouncements and act as a lobby group. The council, however, focuses on the physical nature of earth sciences, and is therefore too restrictive at the present moment - although its council model may be useful to study.

I. Autonomous geography education associations:

As has been demonstrated, the three nations that have autonomous geographic education associations - the US, UK and Australia, also have the highest degree of activity and status in school geography. The GA, NCGE, and AGTA are peer organisations in three different countries. The CCGE is a sub-grouping of the RCGS, with support and input/guidance from the NGS Geography Education Program (the "Alliances"). In order

to support the increase of vertical and horizontal integration, geographic education associations are best served by being stand-alone organisations first and foremost. From such a position of strength, the association is more able to reach out to other associations to create horizontal integration and increase status. Therefore, the CCGE should consider disassociating itself from the RCGS and NGS.

J. Vertical integration:

As we have seen, only Canada has not developed a concerted effort to integrate all levels of geographers and geography educators within geographic education associations. Much of this may also be due to the pre-existing strength and status of social studies in Canadian education. Social studies associations encompass all levels from primary through to post-secondary involvement. Geography must do the same. One may be tempted to think that social studies is an inter-disciplinary approach that can be construed as horizontal integration. The reality is somewhat different because social studies educators and associations have formed vertical alliances, almost to the point of suggesting the subject's status should be equated with that of more 'traditional disciplines'. Traditionally, geography is not considered to be an autonomous discipline within the social studies grouping, and therefore it is often relegated to supporting concepts or providing a simple backdrop for historical events (for example).

In the nations reviewed here, social studies has become one of several external pressures seeking to alter the place of geography within schools. However, the strength and status of the school subject and discipline in those same nations has meant that geography is viewed and treated as a more essential, even core, subject. The degree of vertical integration within geography education associations is essential to oppose the pressures to promote social studies. Moreover, the fact that geography, as a discipline and school subject, is an integrative science that brings together the study of the physical and social worlds, means that geography as a school subject does have a greater inter-disciplinary tradition than the relative newcomer 'social studies'.

K. Horizontal integration:

In interest group research, horizontal integration of associations is often placed in the context of 'networks' within a particular policy area (and in this case, education and curriculum make up such a policy area). Such integration has been referred to in this study as horizontal integration and, in some nations, this takes the form of alliances or coalitions among many societies with similar interests and concerns *within* a particular policy community. As has been definitively shown, a high degree of integration takes place within the UK, US, and Australia. Such integration includes the active participation and support of professional geographers, private sector and applied geography practitioners (as in GIS), cartographers, social scientists, educationalists, and teachers. Moreover, these cases have shown the inherent positive nature of establishing close ties with as broad a community of interest groups as is possible.

Canada, as a case study, provides no indication of any extensive horizontal integration. As previously mentioned, there are signs that cross-association links are beginning to develop. However, these need to be further examined by those associations to see if a more formalized network can be established under the models exemplified in the other nations. Once more, this element of the best practice model needs to be considered in the context of a wide array of interrelated actions as has been outlined here.

L. Promotion and awareness:

The combination of the above elements leads to one of the most critical practices that affects the status of geographic education and the ability of geographic education associations, among others, to affect real change within the political process of curriculum making. All four nations are attempting publicly to promote geographic

education and geography. The development of such activities as the International Geography Olympiad, Geography Awareness Week, media articles and broadly based discussions about the value and impact that new technologies, like GIS, will have on geographic learning and research, are all essential components of increasing a public profile for a geography education organisation

All four case studies have shown attempts, using some similar techniques like the WWW, to maintain a public profile through such publicity and promotional activities. The US seems to be the most successful in this regard. This is most likely due to the US being first among the four nations to establish a statutory Geography Awareness Week, and to underwriting the costs associated with the 1988 Gallop survey, which in turn had the effect of focusing public attention on geography through the introduction of a new term into the public lexicon (i.e.: "geographic illiteracy"). However, the UK and Australia are also very successful in their own right, and the public perception of geography's place in the curriculum has been solidified through the continual pressure and publicity that has originated from the various associations.

Canadian geographic educational organisations are actively developing their own versions of similar activities. It seems that Canada is having more success with publicity than it is with organisation. The preceding statement should be viewed with some caution. If Canada is to gain from the organisational models of integration outlined here, then promotional activities will not, alone, contribute to the increased status and sustainability of the school subject. Status is not just about increasing public profile through media releases, contests, "awareness weeks", or similar 'promotional' activities. Such activities are useful and should be encouraged, but they should also be developed and supported within an organisation that has a broader mandate and larger representation. Because a large number of best practices, outlined here, have been tested and proven successful in other jurisdictions, there is no reason to think similar success could not be found in Canada. Because there are similarities between the language, history and, to a lesser degree, educational structures among the four nations studied here,

there are few barriers that could hamper such interest groups re-organisation, integration, and work towards sustainability and status.

In summary, the model of best practice for geographic education associations wishing to mirror the success of the UK, Australia, and the US must include the following:

- coordination of collaborative activities through a lead agency,
- secure funding of any activities,
- an extensive and long tradition of publishing and disseminating materials to teachers,
- public awareness and political activities,
- support from the private and public sector geographers, businesses, and agencies,
- advisory and consultative services,
- flexibility to add new programs and services as needs and technology changes,
- a clear, public pronouncement of the value of geography,
- promotion of the value of a discipline-based education
- joint committees and task forces as needed,
- private and public involvement in the promotional activities,
- a tradition of strong research,
- regional and international representations,
- innovative use of new technologies,
- realization of the political nature of the curriculum change process,
- Cross-disciplinary involvement,
- Academic involvement

This list is not all-inclusive and there will certainly be areas of new developments, and the emphasis on certain actions being of a “long or traditional nature” does not mean that it needs to take so long to develop. In fact, because the successful implementation of such actions has already been tried and tested in other nations means that similar efforts in Canada can and should be able to develop with fewer mistakes or ‘growing pains’. However, that being said, this thesis has clearly demonstrated that three nations - the US, UK and Australia - have been leaders in developing these best practices and in creating peak organisations that can effectively carry out, in a lasting manner, the initiatives.

It has been shown that Canada could implement such changes, and the geographic education community has begun to move in these directions. What is needed presently is a concerted effort on the part of all geographic associations to find some common ground to create a lasting and effective peak organization. In realistic terms, this should first involve the re-organisation of the CCGE in financial and operational terms. The CCGE should move towards becoming, structurally, similar to the NCGE in the US, the GA in the UK, and/or the AGTA in Australia. In that way, the CCGE would become a 'stand-alone' association in its own right, and become an equal to the above associations in the US, UK and Australia. At the same time, the CCGE could establish a reasonable membership fee. If the CCGE could provide member services, conferences, distribute materials, create 'made-in-Canada' publications, and similar association activities, then a great many teachers and non-teaching geographers may well see a benefit to belonging and financially supporting such an association. At present, the CCGE is a funded committee that seeks no membership dues and provides for re-distribution of information packages to teachers that have been produced by a variety of government agencies, as well as the RCGS and NGS. Such services, while useful, are often under threat of being viewed by those receiving the service as less than valuable because they are free. Additionally, few associations exist that have no membership dues, and those that do face the problem of obtaining committed volunteers to support the association.

The idea of adding a membership fee structure to the CCGE also begins to address the issue of raising sufficient funds to support the long-term viability of the association. Relative to the CCGE, perhaps the best approach is a direct and honest one that asks the current funding agencies (RCGS and NGS) to be open for renegotiating support. The most feasible financial option, combined with membership fees, is for a one-time transfer of a substantial amount of money into a foundation designed to support the operations of the CCGE. There may also be a case that can be made for a more significant transfer of funds from the NGS, if it can be shown that NGS support within Canada is lower per Canadian NGS member than it is within the United States. It may also be the case that some NGS membership funds were transferred to support the development of the US Alliances through membership dues paid in Canada. It should be strongly noted,

however, that the above comments are not intended to raise legal questions, or to insult the work of NGS (or others) in Canada. The comments are intended to highlight the fact that a serious review of financial support for geographic education will need to be undertaken should any peak level organization develop that will establish or require a foundation be established.

Beyond the above course of action, a re-vitalized CCGE should seek to promote the creation of a peak organization that brings together 'equals'. Such an organisation must have the CCGE, RCGS and CAG involved. However, there are other organisations that could be very supportive of a peak level geographic education organization in Canada. For example, the Canadian Institute of Geomatics and the Canadian Cartographic Association are two bodies that seek to represent members involved in, essentially, important applied geographic work. Additionally, those associations, and their members, have grave concerns about the status of geography and the curriculum. Such concerns are often based upon the rapidly changing nature of information technology – specifically as it relates to GIS and other geographically based technologies. Many of the people and companies involved in these associations are also well respected and politically active. Therefore, in terms of supporting the advisory, advocacy, and political work of a peak organization, the extension of member associations into areas not originally seen as having relevance, is key.

Even so, there is need for a great deal of caution because of a lack of a formalized peak organisation and secure funding. Also, there needs to be a recognition of the CCGE as an association in its own right, with publications that can be contributed to by all levels of geographers, and with membership dues and linkages to other associations. So long as the CCGE avoids emulating that element of the best practices of other jurisdictions, it will continue to be viewed as less-than-equal in the global perspective of geographic education. This study has shown that other organizations have developed to address the issues facing geographic education in a sustainable manner. In Canada, the CCGE should be well positioned to take on the task of extending its reach and developing a more effective structure based upon the examples outlined and reviewed herein.

CONCLUSION

The main challenge for geography in an increasing number of countries is the increasing demands on the school curricula that are made from all sorts of socially useful areas of knowledge and learning, e.g. integrated social studies, environmental education as a discrete school subject, civics, political education, etc. School administrators find a solution to their time schedules by allotting time to investigate a single social science/humanities subject in their school curriculum design. Invariably, geography becomes an elective subject in these circumstances and loses its essentiality in the school curriculum and in the eyes of the society that is served by such a curriculum. The difficulty of convincing school administrators of the powerfulness of geography's role as an integrator of the physical and the social sciences tends to get lost in this contest. (Gerber and Lidstone, 1996, 4)

Even after all that has been said, the words of Gerber and Lidstone above provide a sober affirmation of the reality facing geography as a school subject. These notions of geography being involved in a battle for a place in the curriculum are, as has been shown, not new. The research of Goodson, and others as reviewed in the first chapters, confirms the view that geographic education must organize through associations and political interest groups in order to make its case for inclusion in school programs. In developing such organisations and interest group actions, geographers and geography educators need to recall that curriculum is "a battleground where opposing ideologies struggle" and seek to determine what is taught and/or valued by both teachers and students (Naish, 1996a, p. 63). Included within that "struggle" are political and economic forces demanding systems of education that stress the need for new directions in curriculum. Naish also points out that the "events which overtook the geography curriculum in the late 1980's and early 1990's in England and Wales, confirmed once again the strong links between politics and education" (Naish, 1996a, p. 74). For that reason, geographers and geographic educators at all levels within the policy network for geographic education must be concerned with how they cooperate. They will do so most effectively through joint, or peak organisations that have a clear mandate to support geography. Moreover, such mandates must be backed up with funding, promotional tools (publications and Internet) and memberships of sufficient size and breadth to encompass all levels of geographic learning and research.

Several interrelated questions have been advanced in this thesis: Are professional geographers likely to be involved in the process of curriculum change? How successful is any involvement by professional geographers? Can Canadian geographers use the experiences of others in promoting geographic education in Canada? The basis for answering them has been the application of interest and curriculum change research and theories. As has been clearly shown, interest groups related to curricular matters are political in that they are representative of interest groups that seek to dominate or influence a particular sector of society; in this case, the educational sector. In the four nations reviewed, the interest groups have been the various geographic and geography education associations, as well as the peak organisations that act as collaborative and catalytic bodies to achieve common goals in enhancing and securing the sustainability of geographic education in schools. As previously discussed (Semple and Boxall, 1994), sustainability is a critical issue in relation to both the status and presence of geography curriculum in schools programs.

Gerber and Lidstone (1996, p. 3) again succinctly express the reality of the politics and influences of interest groups in changing curriculum.

School curricula in the 1990's have adopted a particularly challenging aspect in the pervasive desire by authorities in countries that are responsible for school education to promote frequent and regular change in the school curricula. This penchant for change may be construed as representing a dynamic aspect of school curricula. However, it may also be construed as varying the school curricula depending upon which political persuasion holds power in a country.

A significant determinant of what is taught in schools is the outcome of public demands for a system that supports social, political and economic goals more broadly based than any one subject can be expected to attain. The public demands are often expressed through political channels. In fact, the educational system can also be considered a political channel in its own right. This theme or lesson has been shown to be important in other jurisdictions - most notably the United States - where 'fear and embarrassment' of

geographic illiteracy became the driving factor behind a resurgence in geographic education. The political element of geographic education interest groups activities is, however, a 'double-edged sword'. Interest groups seeking to secure the place of geography within the curriculum must 'lobby' in the same manner that those groups seeking to keep geography out also use. The "battleground" becomes one where the winner, if such a notion is applicable, is the interest group that can create a public demand or acceptance for the inclusion of a particular school subject. Increasing public demand by raising the awareness and status of a subject becomes a critical function of the interest groups. Geography education associations in the four nations reviewed have had some successful efforts in that regard.

To what extent are professional geographers involved in the process of curriculum change? In all four case studies, they have been found to be involved, though the level and success of such involvement has been greater in the United States, the UK and Australia than in Canada. Recent changes in the reporting and membership structure for the CCGE show a trend to greater involvement by Canadian academic geographers. In discussing the US experience with the development of the *Goals 2000 , Educate America Act* Gerber and Lidstone (1996) point out that geography's inclusion was the outcome of a decade or more of reform and efforts of a "consortium representing the major professional organisations in geography and geographical education in the [US]" (Gerber and Lidstone, 1996, p. 3). How effective, then, is any involvement by professional geographers likely to be? In the other countries, professional geographers have been very successful in developing opportunities for organisations representing geography to have their views put forward. The highest degree of success has been in the US and Australia. There has been some success in the UK, but because of the pressures academic and practicing geographers are feeling in the higher education sector of the UK, they have had less time to focus on the direct needs of schools. Can Canadian geographers use the experiences of others as a model for geographic education in Canada? It is contended in this thesis that they can, with minor adaptations that will be outlined below. The models of peak or sectoral organisations bringing together vertically integrated geography and geographic education associations are perhaps the most important lesson for Canada. In

addition, those organisations must have secure and stable sources of funding to offset costs associated with travel, meetings, and producing publications or developing and implementing programs and initiatives for classroom geography teachers.

No matter how successful or unsuccessful various initiatives are on a national or regional level, it is perhaps useful to keep in mind the cautious warning that alerts geographers and geography teachers to the risks of becoming complacent. Gerber and Lidstone (1996) make it clear that "Geographical education is experiencing different fortunes in different parts of the world" and "a considerable number of geographical educators at international conferences indicate that the place of geographical education in the school curriculum is under threat or is in fact diminishing?" (p. 1). As we have seen throughout this paper, Australia, the United Kingdom, and the United States have established national organizations for geographic education and geography at a professional level to attempt to deal with that issue of geography's place in the curriculum. Their approach has differed from that adopted in Canada.

First, those organisations have sought to increase the public profile of geography by becoming very much involved in national and local level debates about the future content of curriculum, and education in general. This they have done by joining forces with teachers, administrators, and authorities for educational policy, professional geographers, and corporations with an interest in geography, as well as others involved in the application of geography (like GIS professionals). The promotion of the value and importance of geography is but one step towards curriculum change. With the publication of the National Standards for Geography in the United States, the National Curriculum in the UK, and the move towards a national curriculum in Australia, we have seen the results of what joint efforts between professional geographers and teachers can bring about; these curricular developments could not have been completed otherwise.

Second, the establishment of national level bodies that join the efforts of various like-minded geography organizations has a 'trickle down' effect. In Australia, the United Kingdom and the United States, the work of curriculum change takes place at many

levels; national, state or regional, and even local. However, the support and direction (and power) that can come from very strong and vital national bodies does much to help those on the 'front lines' or at the levels below the nation state where the curriculum sees the 'light of day' in the classroom. Associations have the ability to raise the public profile of geography in such a way as to make the curriculum actors (political bodies, parents, students, teachers, etc.) more aware of how to change the curriculum, in what direction, and the rationale for geographic education to be included. The CCGE, from the Canadian perspective, has yet to accomplish as high a level of awareness or public profile as has been the case in the other nations (the lack of strong private sector involvement is an issue related to this). The examples of actions and organisation - both vertical and horizontal - from the other cases gives direction for those associations seeking to enhance geographic education in Canadian schools, and the more specific actions and ideas presented in this and the previous analysis chapter highlight the most central activities that may provide the desired positive outcomes.

Finally, the 'joining of forces' between various 'geographically-oriented associations must be considered within a very quickly changing environment. Of the many possible external factors that can affect such efforts, like a changing economic climate or a new government that promotes a different approach or review of educational policies (including curriculum reviews!), a key development that has a very direct impact on geography is the application of GIS and the Internet within educational settings. Beyond the hype associated with such technological 'paradigm shifts', there are certain real concerns and opportunities that should be considered in the establishment and enhancement of geographic associations – especially peak level organizations. The following chapter explores these ideas and concerns as they relate to geographic associations and peak organisations. The analysis is, admittedly, brief. More detailed explorations of these ideas have been presented elsewhere (see in particular Pallidino, 1992) – hence the notion of the final chapter being an epilogue to this study.

EPILOGUE: GIS AND THE INTERNET

The transitory nature of information and telecommunication technologies is problematic. It means, in part, that one is left wondering if the discussion of relationships between such technologies and geographic education is a matter of after-the-fact analysis (an "epilogue"?) or predictive (a "prologue"?). What is more certain is that research relating to the impact of such technologies on education is plentiful, yet not always supportive of the aims and rationales related to introducing the technologies in the classroom.

Research related to these technologies including developments associated with the Internet, has ranged from calls for more technology in education (see: Hodas, 1993; Luterbach and Reigeluth, 1994a and 1994b.) to calls for less; a de-emphasis of the importance of such new technologies (see: Perelman, 1992 and 1994; Postman, 1993 and 1995.). Some writers have focused on pedagogical and philosophical issues (see: Brady and Barth, 1992; Becker, 1991; Massey and Zemsky, 1996; Reiter, 1993; Shapiro and Hughes, 1996; Young, 1991.), while other researchers have tended to gloss over such educational concerns in favour of works that relate more to promotional zeal and, at times, give the impression that these technologies are a solution to the woes in education (see: Hercz, 1995; MacLeod, 1996; Michie, 1996; Murray, 1993; Reinhardt, 1995; Wallis, 1995; Wulf, 1995; Zoller, 1992.)

Beyond the above cited research into the 'general' nature of technological change in education, research has been undertaken that focuses more on geographic technologies and their impact on geography curricula, research and teaching. In particular, many authors have shown that GIS is an integrative and supportive technology that can be adapted to existing geography programs in a manner that supports and enhances geographic education. Of greater concern to this discussion is, however, how such activities and research are related to the geographical associations. Instructive in that case is the research of key actors in geography who are affecting change in GIS and Internet related technology introduction into the classrooms at secondary and tertiary levels (see: Ballantyne, 1995; Cassettari, 1991; Fitzpatrick, 1990 and 1993; Freeman, 1991; Freeman,

Hassell, and Robinson, 1983; Gerber, 1992; Kemp and Goodchild, 1991; Kemp, Goodchild and Dodson, 1992; Kirman and Jackson, 1993; Mather, 1991; Obermeyer, 1994; Palladino, 1992; Palladino and Goodchild, 1993; Poiker, 1985; Unwin, and Dale, 1989; Unwin, 1991 and 1992; White and Simms 1993; Wood and Cassettari, 1992.).

Beyond the role of geographers and geographic associations, a number of key researchers have sought to explain the impact the new technologies in question have had on how interest groups and associations function in a 'digital age' (see: Poiker, 1985; Stanbury, 1995 and 1996; Stanbury and Vertinsky, 1994.). As was previously discussed in the four case studies, associations that have experienced success in promoting geographic education and enhancing communication with association members have been those groups that have accepted the change in technology and found means to effectively introduce those technologies into their storehouse of association resources.

As stated before, it is the nature of interest group development and action, relative to the introduction of internet-related and GIS technologies in geographic education, which is of particular concern in this chapter. The same societies that developed the first and most significant publications for geographic education have taken the lead in moving towards Internet based communications and publishing. In the UK, the USA and Australia, geography educators and schools placed materials on-line at an early stage. This took place in Canada as well with the development of the CCGE www site. Surprisingly, that particular source does not seem to indicate CCGE involvement on the first cited source (www.ccge.org). It is only after much careful searching of the CCGE web site that one is presented with information about the CCGE, or even an acknowledgement that the CCGE is responsible for the information presented. From an awareness-raising perspective, this has negative implications and decreases the potential, positive promotional opportunity that is made available through such electronic communication tools related to geography (Verduin-Muller, 1992).

Canadian geography educators could learn many lessons from their counterparts in other nations. One is that associations wishing to establish a viable and effective electronic communications infrastructure should first have a strong tradition of inter-association co-operation, preferably through peak organisations. Moreover, it would be best if a tradition of publishing in print preceded any move towards the electronic. The success of US geographic education materials being made available on-line through GENIP, NGS and NCGE confirms this, as they have a strong commitment and history of successful publications, such as *Perspective*, the *Journal of Geography*, the GENIP "Guidelines" and *Geography for Life*. An essential element for the sustainability and enhancement of geographic education is the perception of that subject's status; which is in turn related to the public and professional profile and promotion of the subject as a valued means of education. The Internet provides a unique opportunity in this regard, and has certain advantages over traditional print media. For example, when the Committee of Geography of the US National Academy of Sciences/National Research Council wished to publicise their publication *Rediscovering Geography*, a press release was generated for the print and Internet mediums. Most agencies now use electronic methods to gather information for promotional or news purposes, and as a means to sell texts and increase membership or support (see for example: <http://www4.nationalacademies.org> news archive for April 1st, 1997).

Important factors for promoting successful and sustainable geographic education programs is the involvement of the private sector and professional geographers through peak organisations whose mission is the enhancing of geographic education. The developments associated with GIS technologies as they relate to geographic education have given rise to similar involvement for ensuring lasting co-operation. This again brings into play the critical element of expanding horizontal integration of association activity, even to the level of collaboration with private sector companies. The GIS in k-12 and Libraries programs, supported by ESRI, Inc. and carried on with the co-operation of the AAG, NGS and NCGE (also with GENIP) is an example of such horizontal integration and has shown much progress in both training teachers in the use and application of GIS to school geography, as well as in the over all status raising initiatives

for geographic education (see: Environmental Systems Research Institute, 1994a and 1994b available: <http://www.esri.com> , as well as Cline and Adler, 1995 and Cobb, 1995).

The United States is not, however, the only jurisdiction that has seen the promise of GIS as a leading edge technology fundamental to geography as a discipline (for analysis and cartographic visualization). The UK, with the support of the Association for Geographic Information, the Ordnance Survey, the British Society of Cartographers and the GA and RGS-IBG has been working to develop curricular support materials and professional development opportunities (see <http://www.agi.org> and <http://www.rgs.org>). Again, the linking of private sector and professional geographers with geography educators has been mirrored with the GIS programs.

The call for more emphasis on GIS education at all levels of geography curriculum is not new. Unwin (1991) provided some of the original calls for such actions. Later, David Rhind (then director of the UK Ordnance Survey) discussed the critical nature of the new relationship between geography and GIS as it relates to future developments in Geographic education. There have even been more serious academic theses written regarding the nature and potential of GIS as it relates to geography in schools (see in particular: Palladino, 1994). And as the following remarks by Biddle suggest, there is a definite educational and curriculum value to ensuring recognition of GIS and new technologies as important to the cause of enhancing geographic education.

[T]he ability of teachers to use modern technology in the classroom; and the growth and availability of geographical information systems at the national and international scales have led to the development of geography curriculums which are sufficiently flexible to enable teachers to provide interesting units of work for students living in constantly changing environments. (Biddle, 1996, 29)

It has been contended (Boxall, 1998 and 1999) that GIS, geography, cartography, and new developments in the Internet infrastructure for geospatial data use and dissemination will have a highly visible impact on the practice of geography and geographic education.

It has also been argued that these actions will be best supported and more assured of success if high level and peak organisations could focus more clearly on the task at hand. In the United States, for example, the University Consortium for GIS (UCGIS) has been created to help bridge the gap between private sector developments and needs, the roles of the public sector, researchers in academia and teachers of geography at all levels (see <http://www.ucgis.org>). It has linkages with GENIP, the AAG, the private sector, geographers in the public sector, as well as academics and teachers of geography. Through such horizontal integration of co-operation, the consortium is laying the foundation for continued support, research and action in relation to GIS in geographic education.

In the UK, even cartographers have representation on COBRIG and NGS, and in the United States, many GIS professionals have become closely involved in the Alliances. Clearly then, Canada still has some work to do if its national level geography education organization is to become a truly representative and effective body. As also stated by Boxall (1998 and 1999) and Palladino (1994), the Internet provides a unique opportunity for the distribution and communication about GIS and geospatial information that can enhance and support geographic education. The convergence of technologies and applications into one technical platform, www "browsers and plug-ins" means that new methods for geography teachers to access and use geographic data of all types are now readily available. For example, ESRI, Inc and NGS provide access to automated mapping and data transfer programs through their web sites.

Additionally, the Virtual Geography Project at the University of Texas at Austin is now demonstrating the impact of these efforts for disseminating materials to support GIS education (see, <http://www.utexas.edu/depts/grg/>). Coupled with the development of new on-line credit courses for professional development (Healy et al, 1999), the future looks very promising for teachers who wish to add GIS and the Internet to the already existing wealth of geographic tools and methods. However, it is possible that over time, such developments may come to be viewed as 'old wine in new skins'. Even so, the pace of change in these technologies means that there is little time for debating 'if' or 'why', and only a realistic amount of time to discuss "how". In this regard, associations that promote

and support geographic education have a clear role to play in shaping such actions. Even better would be the use of peak organisations and models already successful presented herein in order to support future initiatives.

As a final note, the most recent conference and publications regarding the impact of the digital age on geographic education (Healy et al, 1999) does not include any contributions from the Canadian perspective. What are the implications of such non-participation? First, it signifies and confirms the idea that Canadian geographical associations have not begun to fully integrate the new techniques into their actions or operations. This means, therefore, that from outside Canada, those same associations will not be viewed as potential contributors or allies. Secondly, it clearly shows a lack of pro-activity on the part of the Canadian associations. This is not an overstatement of the case because that one conference included representations from every major association and peak organisation that was mentioned previously. The conference was also convened by the key players who are influencing the direction of technology and related geography technology curricula. A lack of Canadian input creates marginalization for Canadian concerns. Considering that GIS was invented by Canadians, there are certain ironies at play in this case.

In the end, the geographic technologies, coupled with developments associated with the Internet, provide geographers and geography teachers with a significant opportunity to make the case for geography's inclusion in the curriculum. As this study has shown, many pressures and interest are at work determining what is taught within schools. The *avant garde* often holds sway in such political processes. In order to tone down the 'hype' surrounding technology in education, geographers, geography teachers and others need to work through associations and develop cross-association efforts that will provide more solid pedagogical reasons for the inclusion of technology and geography and vice versa. In this way, geography can come to be seen as having something positive to contribute to new directions in education. That is most likely the best way of ensuring the geographical 'voice' is heard, and that geographic education is sustained.

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