

Comprehensive approaches to school health promotion: how to achieve broader implementation?

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SUMMARY

The Health Promoting School (HPS) and Comprehensive School Health Program (CSHP) initiatives have been proposed as a means of going beyond some of the limitations associated with health promotion initiatives aimed at school-aged children. This involves moving beyond practices that rely mainly on classroom-based health education models, to a more comprehensive, integrated approach of health promotion that focuses both on child-youth attitudes and behaviors, and their environment. Despite the tremendous potential of these initiatives in terms of health and educational gains, only rarely are they actually put into

practice. This article briefly reviews the features of these initiatives, as well as the extent of their implementation and current benefits. Against that backdrop, the authors identify some issues to consider and propose four conditions with a view to achieving broader practical application of these approaches. These issues, which are discussed from the standpoint of potential avenues of further study and courses of action, relate to the comprehensive, integrated nature of the intervention, the school/family/community partnership, political and financial support from policy makers, and, finally, evaluative research as a support to implementation.

Key words: critical issues; comprehensive approaches; literature review; school health promotion

INTRODUCTION

Over the last decade, some initiatives have been proposed by various international organizations with a view to achieving greater integration of youth-oriented health promotion activities, while at the same time influencing individual and social determinants of health [Kolbe, 1985; World Health Organization (WHO), 1991; Allensworth, 1993; English, 1994; WHO, 1997b; McBride *et al.*, 1999]. A survey of recently published Canadian, Australian, British and American studies shows that this comprehensive, integrated approach to child-youth health promotion takes different forms, such as Health Promoting Schools (HPS) and the Comprehensive School Health Program (CSHP). However, despite the potential of HPS and CSHP, current literature on the subject shows

that evaluation results are still few in number and inconclusive as to how to operationalize the global nature of these approaches. Consequently, we might ask whether the comprehensive, integrated approach to health promotion is a promising avenue for more effectively meeting children's needs, and if so, under what conditions?

Purpose of this article

The purpose of this article is to contribute to the dialogue about the translation of this type of approach into practice. As a basis for this discussion, we reviewed the literature on HPS and CSHP, focussing on evaluation results. Our review is not intended to be exhaustive; for example, it

does not include approaches such as Community Schools (The Children's Aid Society, 1997; Dryfoos, 2000) or Full Service Schools (Dryfoos, 1994), which may have some similarities with HPS and CSHP. It is based on peer-reviewed articles, reports and publications issued by international agencies such as the WHO, the Centers for Disease Control and Prevention (CDC) or different Health School Networks. We present our reading of what this review means as a whole by identifying issues and presenting some thoughts on courses of action that have the potential to enhance the practical application of approaches that are still only in their early stages.

DEFINITION OF HPS AND CSHP

The Health Promoting Schools concept was proposed in the early 1980s by the WHO. In 1992, the European Health Promoting Schools Network was set up jointly by the European Regional Office of the WHO, the Council of Europe (CE) and the Commission of the European Communities (CEC) (WHO, 1993). Since then, the concept of HPS has been taken up by other networks throughout the world, such as the one in Australia (The Australian Health Promoting Schools Association, 1996). According to the European Network:

The Health Promoting Schools aims at achieving healthy lifestyles for the total school population by developing supportive environments conducive to the promotion of health. It offers opportunities for, and requires commitments to, the provision of a safe and health-enhancing social and physical environment. [WHO, CEC and CE (1995), cited in (Parsons *et al.*, 1997)]

The literature generally sets out three components or domains of activity that characterize the HPS approach: (i) the formal health curriculum that gives school-aged children the essential knowledge and social skills that will allow them to make enlightened choices affecting their physical and psycho-social health; (ii) the school environment, which refers to the quality of the physical environment and the school climate, the health services and policies of the school; and finally (iii) the school/community interactions (Parsons *et al.*, 1996; Booth and Samdal, 1997).

In both the US and Canada, the CSHP concept is used more frequently (Canadian Association for School Health, 1991; Allensworth *et al.*, 1995)

than the HPS concept, even though the former generally covers the domains of activity referred to previously in defining HPS. According to Allensworth *et al.*:

A Comprehensive School Health Program (CSHP) is an integrated set of planned, sequential, school-affiliated strategies, activities, and services designed to promote optimal, physical, emotional, social, and educational development of students. The Program involves and is supportive of families and is determined by the local community based on community needs, resources, standards, and requirements. It is coordinated by a multidisciplinary team and accountable to the community for program quality and effectiveness. [(Allensworth *et al.*, 1995), p. 2]

The CSHP program comprises eight components: (i) planned, sequential health education across the whole curriculum, from grade 1 to grade 12; (ii) school-based health services; (iii) the school environment; (iv) physical education at school; (v) food services; (vi) counselling services; (vii) health promotion among school staff; and (viii) school/community integration of health promotion efforts (Allensworth and Kolbe, 1987).

Both the HPS and CSHP approaches require a substantial change in the way schools and their staff practice school health. This involves moving from practices that rely mainly on classroom-based health education models to a more comprehensive, integrated construct of health promotion that focuses both on children attitudes and behaviors, and their environment.

The available literature relating to HPS and CSHP brings to light the many different interpretations and ways of putting these concepts into practice (Allensworth *et al.*, 1995; Parsons *et al.*, 1996; WHO, 1996; Thomas *et al.*, 1998; Stewart *et al.*, 2000). Both concepts rely mainly on a 'school-based' approach, meaning that it is in the school environment that a whole range of selected activities come together to form an integrated whole. However, some of the CSHP literature also suggests another form of implementation that is more 'community-based', meaning that the environment being referred to goes beyond the actual school setting to include other youth environments (Allensworth *et al.*, 1995; Parsons *et al.*, 1996). The perspective taken here reflects the fact that the school, while it is clearly an environment conducive to promoting child-youth health, is not the only one responsible for carrying out that mission.

Recent publications by the European HPS Network also indicate that the goals pursued by schools that support this approach depend on partnerships that engage teachers, students, parents and community members as a whole, so that all are involved in a cooperative effort to improve child health (WHO, 1999). Some Australian authors also believe that HPS should form part of a broader scenario of community development, thus strengthening young people's ability to contribute to creating a healthy community (Stokes and Mukherjee, 2000).

THE GAP BETWEEN DISCOURSE AND PRACTICE

Very little is yet known about the way to implement effectively a comprehensive, integrated approach such as HPS or about how it affects youth health (Allensworth *et al.*, 1995; St Leger and Nutbeam, 2000a). The results of the literature indicate a considerable gap between what is recognized as providing the greatest potential for health gains in children, in terms of interventions, and the situation that currently prevails in most schools in Australia (NHMRC, 1996; Marshall *et al.*, 2000), Europe (WHO, 1997b) and the US (Allensworth *et al.*, 1995). Thus, a survey of the literature by Lynagh *et al.*, based on various studies of school-based health promotion programs carried out between 1983 and 1995, reveals that most of these focus on only one of the domains suggested in the HPS approach, namely the health-related curriculum (Lynagh *et al.*, 1997). In terms of school/parent/community relations, 28% of programs report participation in the form of parent and health sector representatives being involved in the planning and implementation of specific programs. None of the 86 programs surveyed covers all the domains suggested under the HPS approach. The study by Marshall *et al.* of 27 exemplar schools in Australia also concludes that despite considerable rhetoric about the importance of school/community partnerships, the portrait that emerges of the current situation is rather disappointing in terms of beneficial interactions (Marshall *et al.*, 2000). The study results show that the schools work well with community health services for the purposes of emergency response (involving mainly physical health issues), but that beyond that there is little evidence of a productive partnership.

In the US, the situation is similar, since not only have few schools actually implemented all the CSHP components, but fewer still take responsibility for ensuring appropriate coordination and integration (Fetro, 1998). In addition, according to the most recent research carried out by the US Centers for Disease Control and Prevention on CSHP initiatives, those components linked to the school environment and parent/community involvement are still only marginally present (Brener *et al.*, 2001; Kolbe *et al.*, 2001). However, the authors point out that it is not possible to obtain complete documentation regarding these two components from assessments of CSHP programs. Nor does the research report on the extent to which the eight components are introduced concurrently and coordinated in each of the schools.

The WHO Experts Committee (WHO, 1997b) also makes the point that the HPS concept is more advanced than its actual implementation. Even though the specific domains it covers can be observed in practice, the interrelationships between them are rarely considered or integrated in such a way as to create a reinforcing effect. Generally speaking, the evaluation results available with respect to HPS and CSHP initiatives show that the vast majority of programs currently in place use individual strategies to develop personal skills in children and youth, but that few concurrently employ strategies that focus on the school environment or community participation (family and community).

There are two possible hypothesis concerning the lack of evidence of successful implementation of this kind of comprehensive, integrated approach: the first has to do with its complexity and how difficult it is to implement it in a meaningful way; the second relates more to its relative novelty and the fact that evaluation results are not yet available. Some authors also indicate that the research on interventions that claim to rely on the HPS approach is only in its infancy (Allensworth *et al.*, 1997; St Leger, 1999).

The first hypothesis appears to be paramount, in that it questions the very basis for these approaches and our ability to go beyond the statements of principle from which they stem. Also, while available literature reviews are not exhaustive, they do all raise questions with respect to feasibility and the conditions under which such approaches can actually be put into practice. These evaluation results raise a number of issues, which in our view need to be addressed. We propose four

conditions that we believe are key to furthering the practical application of this type of approach.

KEY CONDITIONS TO FURTHERING IMPLEMENTATION OF COMPREHENSIVE SCHOOL HEALTH APPROACHES

Condition No. 1: negotiated planning and coordination to support the comprehensive, integrated nature of the approach

Among the obstacles to putting this type of approach into practice, the lack of a common understanding of the HPS or CSHP concepts has been raised by several authors (WHO, 1996; Williams, 1996). However, it seems that this factor is not always perceived as a constraint by practitioners working in the field. As Marshall *et al.* report, some of them see these multiple interventions as an opportunity to interpret and adapt the concept, depending on what best meets the needs of the school (Marshall *et al.*, 2000). Even though these approaches must be flexible in order to reflect the varied and changing contexts in which we evolve, there is a danger they will be diluted if they are not explicitly comprehensive and integrated. By being too inclusive, one risks leaving the impression that every health activity is synonymous with an HPS approach, even if it is not 'comprehensive' in nature (Marshall *et al.*, 2000; Steward *et al.*, 2000; St Leger and Nutbeam, 2000b).

In this context, giving due consideration to the multiple facets of a comprehensive (multi-target and multi-strategy) intervention and the appropriate way to integrate them is a fundamental issue. The potential effectiveness of this kind of approach lies not in the success of the components taken in isolation, but rather in well orchestrated, coherent strategies, i.e. health education, public policies, and communication, which concurrently target several dimensions of health and well-being deemed to have a high priority (Allensworth and Kolbe, 1987). For that reason, it is important that the intervention focus simultaneously on children, school environment and school/family/community links using various strategies to address the multiple objectives.

Because of the complexity of these approaches, the conditions that support and facilitate integration of the different facets or components of the program must be put in place. Among the conditions identified in the literature review,

some strike us as being particularly decisive. In order to avoid confining oneself to one-time, compartmentalized interventions, it would appear to be especially important that the path chosen to translate the comprehensive, integrated approach into action rely on systematic and negotiated planning. In multidimensional programs, as is the case here, careful planning is often seen as a prerequisite for achieving the desired results and maintaining participant satisfaction (Butterfoss *et al.*, 1996; Kegler *et al.*, 1998). It is equally important for tracking the progress of the work carried out through the different steps that have been identified in the action plan, and for maintaining an adequate level of integration between the different activity domains. It is through planning such as this that the consistency and comprehensive nature of the approach can be preserved. This first aspect of planning is anticipated and allows the various actors to give a direction to the action and to achieve convergence among them through their agreements with respect to the different components of the action plan (Deschesnes *et al.*, 1999). There is also a second aspect of planning that allows adjustments prompted by changes in context. In order to maintain coherence in the actions and convergence among participants, these adjustments should be made in light of the negotiated action plan. Mintzberg suggested that the concepts of 'intended strategy' and 'emergent strategy' should inform the two aspects of planning, which are both essentials in the context of intersectoral action (Mintzberg, 1994).

Because of the comprehensive, integrated nature of the action plan, the sharing of evaluation results represents, within the planning exercise, a means to stimulate collective reflection and create a sense of interdependency between stakeholders involved in different domains of activity. Furthermore, this is an opportunity to provide evidence of progress that is a significant source of motivation for all partners in the pursuit of their goals (Deschesnes *et al.*, 2001).

In the context of systematic and negotiated planning, the issue of coordination takes on special significance, because it is a way of ensuring that every domain of activities rolls out in accordance with the parameters set, as well as in tune with and in support of the other domains (Renisow and Allensworth, 1996; McKenzie and Richmond, 1998). It is therefore important that the person or persons responsible for the coordination have a good knowledge of each of

the components or activity areas, as well as an integrated, comprehensive view of how they fit together. Such a person or persons must thus possess the skills that this task requires, such as leadership, management, planning and evaluation (Davis and Allensworth, 1994; Moon *et al.*, 1999; Valois and Hoyle, 2000), as well as having the time and human and financial resources to properly fulfil such a mandate.

Condition No. 2: intersectoral action to actualize the partnership between school, family and community

Another fundamental issue relates to the problem of putting the partnership component into actual practice, a component that we believe acts as a catalyst as part of a comprehensive, integrated approach to child-youth health promotion. Whether the approach selected is school- or community-based, most of the literature dealing with the HPS or CSHP concepts emphasizes the importance of good relations between the school, the family and community stakeholders.

However, despite a desire to strengthen these links and facilitate greater openness on the part of the schools towards their communities, the current literature is anything but clear on how to make this partnership a reality. The design of such a partnership influences the participation of, and potential collaboration between, stakeholders in the schools and those representing other community sectors such as non-governmental organizations or local government. For example, a study of Australian teachers by St Leger shows that they see the partnership or linkages with the community as a means of acquiring resources, and not as a way to work together with community stakeholders to carry out joint activities aimed at children (St Leger, 1998). According to a study subsidized by the US Department of Education, most administrators and teachers see their relationship with parents as being one-sided; in other words, they want parents to support them in their educational role, whereas parents are more interested in carrying on a reciprocal relationship with teachers [National PTA, 1997, cited in (Shartrand *et al.*, 1997)]. In Quebec, a similar observation was reported during the 1996 Estates General on Education (Conseil de la Famille et de l'Enfance du Québec, 2000). Given this reality, questions necessarily arise as to the nature of the partnership to be advocated as part of the HPS

and CSHP approaches. From the findings above, it appears that the contribution of parents and community stakeholders should be part and parcel of a school/ family/community partnership that reflects the prevailing features of children's living environments, so that all the key community players participate in the decision-making process and work jointly towards enhancing personal development, social integration and educational achievement in children.

Within the specific framework of broader practical application of a comprehensive, integrated approach to child-youth health promotion, partnership has even greater relevance if it is believed that the multiple determinants associated with children's different living environments must be acted upon concurrently. In that context, the alliances developed between stakeholders or partners representing different child environments are the lifeblood of the program. That means that the program relies on coordination of school and community stakeholder efforts to create a synergy of mutually reinforcing actions with optimal impact on youth health and well-being (Allensworth *et al.*, 1995). As Leviton *et al.* point out, building a coalition of parent and other community stakeholders is a prerequisite to establishing a lasting, participatory interface between the community and youth protection and well-being authorities (Leviton *et al.*, 2000). In this context, new partnership practices are needed to attain this goal.

Among relevant solutions to be considered with a view to implementing a comprehensive, integrated approach to child-youth health promotion, a strategy based on intersectoral action would seem to be one of the options most worthy of pursuit. This is precisely the type of strategy that is advocated when responding to a problem situation requiring collective action on multiple determinants (Costongs and Springett, 1997; Ministère de la Santé et des Services Sociaux, 1997; WHO, 1997a; Roussos and Fawcett, 2000). It is believed that such a strategy affords a more efficient use of resources (i.e. by avoiding duplication of services and programs) and that program quality can be enhanced through stronger joint action and better integration of resources between the sectors (Holosko and Dunlop, 1992). Some authors also point to intersectoral collaboration as a factor that can facilitate implementation of HPS, albeit without characterizing such a collaboration further or linking it to other dimensions of the concept (MacDonald

and Ziglio, 1994; Thomas *et al.*, 1998; Rissel and Rowling, 2000).

In this regard, the intersectoral coalition must set the terms of the collaboration while recognizing both the cooperative and power relationships that are inherent in this type of strategy. This requires the development of mechanisms (e.g. shared vision, positive working climate, effective leadership, participatory decision-making process, formalized procedures, negotiation and shared agreements) that allow the different actors to cooperate effectively, even though their interests do not converge entirely (Chavis, 2001; Foster-Fishman *et al.*, 2001; US Department of Education, 2000).

Condition No. 3: political and financial support from decision makers as leverage for adequate implementation of comprehensive approaches

As a number of authors have mentioned, the lack of political and financial support from the sectors involved in these kinds of initiatives constitutes a significant barrier to their implementation (Rissel and Rowling, 2000; Stewart *et al.*, 2000; Stokes and Mukherjee, 2000). Thus a lack of resources for providing personnel training, coordination, intersectoral participation and so forth can undermine implementation of a comprehensive action plan.

Gottlieb *et al.* also comment on the lack of sensitivity to school culture and school needs, the inability to develop integrated programs because funding is issue-specific, political conservatism that presents intersectoral collaboration as being demanding and unproductive, and finally communication problems often rooted in cultural differences between professions (Gottlieb *et al.*, 1999). All are obstacles to implementation of a comprehensive approach. Because of the lack of support, there is a danger that the interventions will not be intensive enough to produce significant and lasting effects. As Bandura emphasizes, because the implementation of such programs is flawed, efforts in this area discredit health promotion interventions more than they contribute to achieving population health gains (Bandura, 1998).

Even though the political and financial commitment and support of policy makers is considered essential for successful health promotion intervention (Leeder, 1997), such commitment is still lukewarm in many countries that subscribe to these principles (O'Neill *et al.*,

2000; Ziglio *et al.*, 2000). Some authors also believe that the failure of many social programs stems from a quick-fix mentality and from lack of recognition of the complexity of organizational and social structures (Hord, 1997; McEvoy and Welker, 2000), which in turn leads to a tendency to invest in one-time interventions of low intensity, producing few lasting changes.

In this context, access to a support structure of health and education sectors committed to promoting this kind of initiative is necessary in order to encourage buy-in from key stakeholders such as school staff (Parsons *et al.*, 1996). It is also vital for developing appropriate support in the form of resources, proper training and available time (Marx, 1998; St Leger, 1998).

Condition No. 4: evaluation as a means to help develop effective interventions further

According to Allensworth *et al.*, the future of CSHP will depend on its ability to demonstrate that it has a meaningful effect on child-youth health and educational achievement (Allensworth *et al.*, 1997). One of the fundamental goals of evaluative research is in fact to verify the effectiveness of programs; in other words, their ability to produce the desired effects in terms of health, well-being or academic achievement. As such, evaluation is an important component, since it serves to guide actions and justify the energy and resources devoted to them.

Despite the appropriateness of such a goal, a preliminary, and thus more immediate question than assessing the outcomes of such initiatives on child-youth health and well-being has to do with the feasibility and adequacy of implementing this type of social intervention in the current environment. As mentioned above, the recent literature dealing with this particular issue points to obvious difficulties associated with the ability to implement comprehensive, integrated approaches such as HPS and CSHP. As a result, rigorous evaluation of different ways of putting them into practice in a variety of contexts is the first step towards assessing such initiatives, with a view to providing adequate support for implementation. We believe this to be a legitimate choice, given that the rationale for these approaches is the fact that health and well-being are multidimensional in nature, and require stakeholders to act concurrently on individual and social determinants for greater positive impact on child-youth health. Flawed implementation, such as

inconsistency with this rationale, can only generate mixed results.

In order to determine with confidence whether this type of approach is effective, it is clearly important for the evaluation to provide evidence that programs have been implemented as an integrated set of components. As Ennet *et al.* tell us with respect to CSHP, poor standards of implementation can result in less than optimal programs that undermine the credibility of this approach within the education and health constituencies (Ennet *et al.*, 1994).

One fundamental requirement that needs to be met is identification of the essential components of the approach and demonstration of how they fit together, so as to propose intervention models that can be put into practice in natural contexts. Because the potential for reproducing projects and adapting them to specific needs is of crucial importance, a clear understanding of the implementation process in relation to these components is a must (Cronbach, 1982). Process evaluation takes on extra relevance here since it provides the necessary information for identifying problems and making adjustments, where required, as implementation proceeds. It is a way of verifying that the program components, methods, human and physical resources and target activities are sufficient and appropriate to meet the desired goals.

Given that environment-related components have not been implemented to the same extent, they deserve special attention. Effective collaboration between schools, parents and other key community stakeholders, which is at the heart of such initiatives, should also be the focus of in-depth research, with a view to providing a solid foundation for developing this aspect further (Mullen *et al.*, 1995; Gottlieb *et al.*, 1999). Furthermore, in order to guide adequately the intervention as well as the assessment of these environmental components, their development must have a theoretical or conceptual basis that is appropriate for these different levels of intervention. Therefore, as a complement to psychosocial theories on behavioral change, those dealing with organizational change and local development warrant special attention. The implementation of this type of intervention could also benefit from the latest research on intersectoral action and research from the education field on organizational change in schools. Finally, evaluation results stemming from a variety of initiatives, both school-based and

community-based, in different contexts, are also desirable in order to gauge their respective contributions, as well as the problems and challenges they pose for anyone wishing to undertake this type of initiative.

CONCLUSION

The HPS and CSHP concepts suggest promising results in terms of better meeting the educational and health needs of school-aged children. The available literature shows that evaluation results are still too few in number and inconclusive at present regarding operationalization of some of their dimensions, particularly in relation to the school environment and school/community links. However, based on currently available results, we have identified some issues for which we have proposed four conditions we see as critical for fostering a broader implementation of comprehensive school health approaches.

Although the issues and concerns identified in this paper are significant, they must not act as a barrier to further efforts aimed at introducing more substantive approaches to child-youth health promotion. The key conditions we have identified are: (i) systematic and negotiated planning and coordination in order to translate into practice the global and integrated nature of the approach; (ii) intersectoral action that relies on mechanisms that facilitate effective partnership among members involved in the intervention (e.g. shared vision, participation in the decision-making process); (iii) political and financial commitment from various decision makers, which is essential to attain the intensity of implementation needed to yield substantial health and educational gains, without unnecessarily draining the energies of those who deliver them; and (iv) process evaluation as a way to support refinement of the intervention and full implementation. These conditions are expected to provide the leverage to enhance the implementation of these promising approaches that have the potential to meet the educational, health and well-being needs of school-aged children better.

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REFERENCES

- Allensworth, D. D. (1993) *Expansion of Comprehensive School Health Program: What Works*. Paper presented at the Institute of Medicine Workshop, Integrating Comprehensive School Health Programs in Grades K-12. Washington, DC.
- Allensworth, D. D. and Kolbe, L. J. (1987) The Comprehensive School Health Program: exploring an expanded concept. *Journal of School Health*, **57**, 409–412.
- Allensworth, D. D., Wyche, J., Lawson, E. and Nicholson, L. (1995) *Defining a Comprehensive School Health Program: An Interim Statement*. Division of Health Sciences Policy, National Academy Press, Washington, DC.
- Allensworth, D. D., Lawson, E., Nicholson, L. and Wyche, J. (eds) (1997) *Schools and Health: Our Nation's Investment. Comprehensive School Health Programs in Grades K-12*. Institute of Medicine, National Academy Press, Washington, DC.
- Bandura, A. (1998) Health promotion from the perspective of social cognitive theory. *Psychology and Health*, **13**, 623–649.
- Booth, M. L. and Samdal, O. (1997) Health-promoting schools in Australia: models and measurement. *Australian and New Zealand Journal of Public Health*, **21**, 365–370.
- Brener, N. D., Dittus, P. J. and Hayes, G. (2001) Family and community involvement in schools: the results from the School Health Policies and Programs Study 2000. *Journal of School Health*, **71**, 340–350.
- Butterfoss, F. D., Goodman, R. M., Wandersman, A., Valois, R. F. and Chinman, M. J. (1996) The plan quality index. An empowerment evaluation tool for measuring and improving the quality of plans. In Fetterman, D. M., Kaftarian, S. J. and Wandersman, A. (eds) *Empowerment Evaluation. Knowledge and Tools for Self-assessment and Accountability*. Sage Publications, Thousand Oaks, CA, pp. 304–331.
- Canadian Association for School Health (1991) *Comprehensive School Health: A Consensus Statement*. Surrey, BC.
- Chavis, D. M. (2001) The paradoxes and promise of Community Coalitions. *American Journal of Community Psychology*, **29**, 309–320.
- Conseil de la Famille et de l'Enfance (2000) *Pour une Plus Grande Complicité entre les Familles et les Élèves*. Conseil de la Famille et de l'Enfance, Québec.
- Costongs, C. and Springett, J. (1997) Joint Working and the Production of a City Health Plan: The Liverpool Experience. *Health Promotion International*, **12**, 9–19.
- Cronbach, L. J. (1982) *Designing Evaluations of Educational and Social Programs*. Jossey-Bass, San Francisco, CA.
- Davies, T. M. and Allensworth, D. (1994) Program management necessary component for the Comprehensive School Health Program. *Journal of School Health*, **64**, 400–404.
- Deschesnes, M., Jomphe Hill, A., Léveillé, D. and D'Amours, G. (1999) *Évaluation d'Implantation d'une Action Intersectorielle dans le Cadre du Projet 'Écoles-milieus en Santé', dans la Région de l'Outaouais*. Direction de la Santé Publique, RRSSSO, Hull.
- Deschesnes, M., Jomphe Hill, A. and D'Amours, G. (2001) *Évaluation du Processus d'Action Intersectorielle au Cours de la Phase de Mise en Œuvre du Projet 'Écoles et Milieus en Santé' dans l'Outaouais*. Direction de la santé publique, RRSSSO, Hull.
- Dryfoos, J. (1994) *Full Service Schools: A Revolution in Health and Social Services for Children, Youth and Families*. Jossey-Bass Publishers, San Francisco, CA.
- Dryfoos, J. (2000) *Evaluation of Community Schools: An Early Look*. Coalition for Community Schools, Washington, DC.
- English, J. (1994) Innovative practices in comprehensive health education programs for elementary schools. *Journal of School Health*, **64**, 188–191.
- Ennet, S. T., Tobler, N. S., Ringwalt, C. L. and Flewelling, R. L. (1994) How effective is drug abuse resistance education? A meta-analysis of Project DARE outcome evaluations. *American Journal of Public Health*, **84**, 1394–1401.
- Fetro, J. V. (1998) Implementing coordinated school health programs in local schools. In Marx, E. Wooley, S. F. and Northrop, D. (eds) *Health is Academic*. Teachers College Press, NY, pp. 15–42.
- Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S. and Allen, N. A. (2001) Building collaborative capacity in community coalitions: a review and integrative framework. *American Journal of Community Psychology*, **29**, 241–261.
- Gottlieb, N. H., Keogh, E. F., Jonas, J. R., Grunbaum, J., Walters, S. R., Fee, R. M. et al. (1999) Partnerships for comprehensive school health: collaboration among colleges/universities, state-level organizations, and local school districts. *Journal of School Health*, **69**, 307–313.
- Holosko, M. J. and Dunlop, J. M. (1992) Evaluating interorganizational approaches to service delivery: a case example of the family violence serve project in Kent county, Ontario. *Canadian Journal of Program Evaluation*, **7**, 115–129.
- Hord, S. M. (1997) *Professional Learning Communities: Communities of Continuous Inquiry and Improvement*. Southwest Educational Development Laboratory, Austin, TX.
- Kegler, M., Steckler, A., McLeroy, K. and Malek, S. (1998) Factors that contribute to effective community health promotion coalitions: a study of 10 project ASSIST coalitions in North Carolina. *Health Education and Behavior*, **25**, 338–353.

- Kolbe, L. J. (1985) Why school health education? An empirical point of view. *Health Education*, **18**, 116–120.
- Kolbe, L. J., Kann, L. and Brener, N. D. (2001) Overview and summary of findings: School Health Policies and Programs Study 2000. *Journal of School Health*, **71**, 253–259.
- Leeder, S. R. (1997) Health-promoting environments: the role of public policy. *Australian and New Zealand Journal of Public Health*, **21**, 413–414.
- Leviton, L. C., Snell, E. and McGinnis, M. (2000) Urban issues in health promotion strategies. *American Journal of Public Health*, **90**, 863–866.
- Lynagh, M., Schofield, M. and Sanson-Fisher, R. (1997) School health promoting programs over the past decade: a review of the smoking, alcohol and solar protection literature. *Health Promotion International*, **12**, 43–60.
- MacDonald, H. and Ziglio, E. (1994) European schools in a changing environment: health promotion opportunities not to be lost. In Chu, C. M. and Simson, R. (eds) *Ecological Public Health: From Vision to Practice*. Centre for health promotion, Toronto, pp. 151–157.
- Marshall, B. J., Sheehan, M. M., Northfield, J. R., Maher, S., Carlisle, R. and St Leger, L. H. (2000) School-based health promotion across Australia. *Journal of School Health*, **70**, 251–252.
- Marx, E. (1998) Summary: fulfilling the promise. In Marx, E., Wooley, S. F. and Northrop, D. (eds) *Health is Academic*. Teachers College Press, NY, pp. 292–299.
- McBride, N., Midford, R. and Cameron, I. (1999) An empirical model for school health promotion: the Western Australian School Health Project Model. *Health Promotion International*, **14**, 17–24.
- McEvoy, A. and Welker, R. (2000) Antisocial behavior, academic failure, and school climate: a critical review. *Journal of Emotional and Behavioral Disorders*, **8**, 130–140.
- McKenzie, F. D. and Richmond, J. B. (1998) Linking health and learning: an overview of coordinated school health programs. In Marx, E., Wooley, S. F. and Northrop, D. (eds) *Health is Academic*. Teachers College Press, NY, pp. 1–15.
- Ministère de la Santé et des Services sociaux du Québec (1997) *Priorités Nationales de Santé Publique 1997–2002*. Gouvernement du Québec, Québec.
- Mintzberg, H. (1982) *Structure et Dynamique des Organisations*. (Traduit de l'américain par Pierre Romelaer). Les Éditions d'Organisation, Paris.
- Moon, A., Mullee, M., Rogers, L. et al. (1999) Helping schools to become health-promoting environments—an evaluation of the Wessex Healthy Schools Award. *Health Promotion International*, **14**, 111–122.
- Mullen, P. D., Evans, D., Forster, J., Gottlieb, N. H., Kreuter, M., Moon, R. et al. (1995) Settings as an important dimension in health education/promotion policy, programs, and research. *Health Education Quarterly*, **22**, 329–345.
- National Health and Medical Research Council (NHMRC) (1996) *Effective School Health Promotion. Towards Health Promoting Schools*. NHMRC Health Advancement Standing Committee. Australian Government Publishing Service, Canberra.
- O'Neill, M., Pederson, A. and Rootman, I. (2000) Health Promotion in Canada: declining or transforming? *Health Promotion International*, **15**, 135–141.
- Parsons, C., Stears, D. and Thomas, C. (1996) The Health Promoting School in Europe: conceptualising and evaluating the change. *Health Education Journal*, **55**, 311–321.
- Parsons, C., Stears, D., Thomas, C., Thomas, L. and Holland, J. (1997) The implementation of ENHPS in different national contexts. The European Network of Health Promoting Schools. WHO/EURO, Copenhagen.
- Reniscow, K. and Allenworth, D. (1996) Conducting a comprehensive school health program. *Journal of School Health*, **66**, 59–63.
- Rissel, C. and Rowling, L. (2000) Intersectoral collaboration for the development of a national framework for Health Promoting Schools in Australia. *Journal of School Health*, **70**, 248–250.
- Rudd, R. E. and Walsh, D. C. (1993) Schools as healthful environments: prerequisite to comprehensive school health. *Preventive Medicine*, **22**, 499–506.
- Shartrand, A. M., Weiss, H. B., Kreider, H. M. and Lopez, M. E. (1997) *New Skills for New Schools: Preparing Teachers in Family Involvement*. Harvard Family Research Project, Cambridge, MA.
- St Leger (1998) Australian teachers' understandings of the Health Promoting School concept and the implications for the development of school health. *Health Promotion International*, **13**, 223–235.
- St Leger (1999) The opportunities and effectiveness of the Health Promoting Primary School in improving child health—a review of the claims and evidence. *Health Education Research*, **14**, 51–69.
- St Leger, L. and Nutbeam, D. (2000a) A model for mapping linkages between health and education agencies to improve school health. *Journal of School Health*, **70**, 257–259.
- St Leger, L. and Nutbeam, D. (2000b) Research into Health Promoting Schools. *Journal of School Health*, **70**, 45–50.
- Stewart, D. E., Parker, E. and Gillepsie, A. (2000) An audit of Health Promoting Schools policy documentation. *Journal of School Health*, **70**, 253–254.
- Stokes, H. and Mukherjee, D. (2000) The nature of health service/school links in Australia. *Journal of School Health*, **70**, 255–256.
- The Children's Aid Society (1997) *Building a Community School*, 2nd edition. The Children's Aid Society, New York.
- Thomas, C., Parsons, C. and Stears, D. (1998) Implementing the European Network of Health Promoting Schools in Bulgaria, the Czech Republic, Lithuania and Poland: vision and reality. *Health Promotion International*, **13**, 329–338.
- US Department of Education (2000) *Schools as Centers of Community. A Citizens' Guide for Planning and Design*. US Department of Education, Washington, DC.
- Valois, R. F. and Hoyle, T. (2000) Formative evaluation results from the Mariner Project: a coordinated school health pilot program. *Journal of School Health*, **70**, 95–103.
- WHO (1991) *Comprehensive School Health Education. Suggested Guidelines for Action*. WHO, Geneva.
- WHO/EURO (1993) *The European Network of Health Promoting Schools*. A joint WHO/EURO, Commission of the European Communities and Council of Europe Project, Copenhagen.
- WHO (1996) *Improving School Health Programmes: Barriers and Strategies*. The School Health Working Group. The WHO Expert Committee on Comprehensive School Health Education and Promotion, Geneva.

- WHO (1997a) *Intersectoral Action for Health: a Cornerstone for Health for All in the 21st Century*. Report of the International Conference, 20–23 April, Halifax, Canada.
- WHO (1997b) *Promoting Health through Schools. Report of a WHO Expert Committee on Comprehensive School Health Education and Promotion*. WHO Technical Report Series 870, Geneva.
- WHO/EURO (1999) *The European Network of Health Promoting Schools*. WHO/EURO, Copenhagen, <http://www.who.dk/webmaster@who.dk>
- Williams, J. H. (1996) The School Environment and Health. *Promotion and Education*, 3 (1), 10–14.
- Ziglio, E., Hagard, S. and Griffiths, J. (2000) Health promotion development in Europe: achievements and challenges. *Health Promotion International*, 15, 143–154.