

THE TEACHERS' CENTRE
AS A BASE FOR PROFESSIONAL GROWTH AND INNOVATION IN EDUCATION
WITH PARTICULAR REFERENCE
TO THE CURRENT STATE OF SUCH CENTRES IN CANADA

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ABSTRACT

Problems of declining enrollment, new educational programs and the pressures of accountability have increased interest in teacher in-service education. Teachers' centres have emerged as one means of providing in-service, but little is known about their operation in Canada. The purpose of this study was to develop a conceptual model of a teachers' centre that would provide effective in-service, and to examine Canadian teachers' centres in the light of this framework, looking specifically at their organization, policy, and philosophy.

Most literature pertaining to teachers' centres addressed the issues of definition, underlying assumptions, control and basic services. Within these areas, nine propositional statements were made forming the basis of a model designed to maximize professional growth among teachers, and to stimulate innovation in education. These are: (1) The teachers' centre is a physical location where teachers can learn and help others to learn classroom instructional and developmental techniques. (2) Fundamental educational reform originates with the classroom teacher. (3) Outside experts can assist but not instigate. (4) Teachers desire professionalism. (5) Teachers' centres should offer extensive in-service activities for the professional development of teachers. (6) Teachers' centres should provide a materials source, both for manipulation and dissemination. (7)

Teachers' centres should be the base of extensive research and developmental activities. (8) The teachers' centre should be run by teachers and for teachers, and should be financed by the school system in which it is located. (9) The prime focus of the centre is the classroom teacher.

Seventy-six centres identified across Canada were surveyed using a questionnaire examining policy, centre usage, staffing, centre facilities, centre programming and priorities, decision-making, developmental activities and research. Forty-six centres responded to the questionnaire.

The results indicated that Canadian teachers' centres focus on in-service activities and materials distribution, with only limited attention being paid to curriculum or long-term professional development activities. Further, most Canadian centres are attached to a local school district, and most of the power and decision-making authority rests with the administrative personnel. A further analysis, which compared centres to the theoretical model, did not reveal any area where a consistent match occurred. Rather, great variation was found among centres. The only significant difference between provinces was found in the area of finance and control.

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I. Introduction to the Study

Background to the Problem

In-service Education

Interest in in-service training, an ongoing concern among educators, received a considerable impetus with the arrival of the space age. The Russian launching of Sputnik in 1957 left the leaders of the Western World looking to their mathematics and science programs, in an attempt to insure that space technology would not be dominated by the Communist block (Thornbury, 1973). And in doing so, they had to look to the updating of their teachers in the new and innovative teaching techniques that would be necessary to change the in-class performance of students.

The existence of over a quarter of a million people in the U.S.A. alone that are directly involved in in-service teacher training (Howey, 1976) illustrates dramatically the interest and commitment towards the "total professional development" of teachers called for by Smith in the statement, "total development of children in school cannot be even approximated without equal effort to provide total professional development

of their teachers" (1975, p.330).

The affluence of the 1960's allowed central educational authorities in North America to undertake the development of many new programs and to hire massive numbers of support personnel for the delivery of workshops, training sessions and short courses. Typically, however, these programs were based on a top-down method of assistance, and arose out of in-service needs as perceived by the central authorities, rather than as perceived by teachers themselves. Edelfelt (in Howey, 1976) notes such in-service and condemns them as "piecemeal, patchwork, haphazard and ineffective". Miles (1975a) in preparing a "review, commentary and reflection on the issues and problems" that arose at a Syracuse University conference on teachers' centres, noted that there seemed to be

a strong sense that existing institutions, particularly local school districts and institutions of higher learning, have been unable to provide serious learning opportunities for experienced teachers at a level which would improve their competence enough to bring about a step change in the effectiveness of the American education system. (p.168)

With a decline in school enrollment in the 1970's, however, a retrenchment of these widespread services began to occur. Fewer students meant deflated school budgets, and less money for resource material and personnel. Moreover, schools began to come under much closer scrutiny by the taxpayers who were experiencing declining resources and rising costs, and who wanted assurance that the money spent on education was not being

wasted. School authorities faced the pressure of accountability, both for how the tax dollar was spent, and for the quality of education delivered. The need for good teaching methods placed a demand on the authorities for quality in-service programs.

But declining enrollment also meant that fewer new teachers were being hired each year. Thus the most current findings in education, generally passed on into the system from the universities through their graduates, were not sifting through as well as they had previously. The teaching population was aging, and in danger of going stale (Bolan, 1978). Moreover, in order to maintain a student body, in light of greatly reduced numbers of preservice students, Faculties of Education had to start attracting in-service teachers (Howey, 1976). Thus they too felt a pressure to provide quality in-service programs.

With the teaching population tending towards greater stability due to less turnover in a time when jobs were scarce, and getting scarcer (Bolan, 1978), teachers also gained more political awareness, and began to push for greater say in all aspects of education, including their in-service training programs.

These pressures, in the school system, universities and profession, all indicated a strong need for an integration of "diverse elements within both the profession and the community and a need to bring them to focus on fundamental issues of school improvement" (Howey, 1974, p.30).

In order to achieve this integration, American authorities began to examine a concept already well entrenched in the British education system: teachers' centres.

Teachers' Centres in Britain

Centres arose in England and Wales to meet the same problems that American educators faced in the early 1960's. The Nuffield foundation insisted that Local Education Authorities (LEAs) participating in the pilot mathematics projects establish centres where teachers could meet to discuss problems related to the new curricula and offer suggestions for changes in its format. They also insisted that the centre should be seen to be run by and for the teachers. These places quickly grew to be centres for many other teacher development activities, with the Nuffield Mathematic Project having been a lever for introducing a new attitude into the curriculum, one where the intrinsic connection between curriculum development and in-service training could be demonstrated and forwarded (Matthews, 1973).

Since centres were thus in 'on the ground floor' of the current push for in-service development, and since they were run primarily by teachers in a system stressing greater teacher control over curriculum, practically every change in the British system throughout the 1960's and 1970's served to strengthen the teachers' centre movement (Thornbury, 1978). Increased financial resources of the 1960's allowed centres to establish a

solid base in many LEAs. The review of the entire secondary school system in 1973, generated by the raising of the school-leaving age (ROSLA), led to curriculum development groups that gave more credibility to the centres in which they met.

Integrated studies in secondary schools and integrated days at the primary level also gave a push to greater curriculum development at the centres. In addition, the teachers' centres were able to respond with programs to help the induction of up to 2500 new teachers in urban areas each year, and to provide courses for expanding the use of educational technology in the classroom.

Centres also were available when teachers found a need to "retrieve lost or unfashionable skills" (Thornbury, 1978, p.55), and most urban centres offered self-help groups, recreational facilities and a friendly, neutral atmosphere.

The teachers' centres were controlled by the LEAs and not reliant on national or private funding. Because of this, the reorganization of the LEAs between 1964 and 1974 led to some restructuring, or merging, of centres. But their influence increased, with many LEAs proudly presenting their centres as the core of their developmental activity. Thornbury sums up the current status of centres in Britain:

The professional democracy and neutrality of centres were much stressed. Teachers, social workers, inspectors, and others could rub shoulders without their epaulettes being observed, or so theory ran. Teachers' centres did not fit into any firmly perceived

hierarchical structure. Wardens (directors) were given vague job definitions, and their creative freedom was limited to encouraging teachers to attend on a voluntary basis after school. Since no one in the unions, inspectorate or administration saw centres as potentially powerful, the much vaunted neutrality sometimes represented benign neglect. Still, centres were increasingly successful. Their power did grow, even without a captive audience and despite the initial shoestring budgets. Characteristically, by 1977 the urban teachers' centre in London had a staff of ten: professional, secretarial, technical and catering. Teachers' centres had arrived. (1978, p.57)

Teachers' Centres in the United States

The American experience touches the British at several points in time but rarely in form. In the late 1960's many individual groups of teachers across the U.S.A., growing dissatisfied with the increased frustrations of a lonely, isolated classroom (Johnson, 1978), set up centres run for, and by, teachers. These were generally patterned on the British model, but were financed by grants from private foundations. Rather than being part of the school system, these "grass-roots" centres were designed as alternatives to traditional in-service activities (Buxton, 1978). Many of these centres still function across the U.S.A. and continue to provide 'a neutral territory' for teacher in-service.

Starting in the late 1960's the Federal Government of the U.S.A. became very involved in the development of teachers' centres. A 1966 report published by the National Defence Education Act (NDEA) National Institute (in Schmeider, 1977)

advocated the development of a national network of training complexes. The Office of Education created an Ad Hoc National Advisory Committee that studied and reviewed the idea and set up four functional and three structural pilot projects, in anticipation of a substantial national network. A task force established in 1970 recommended several changes for the training complex, and outlined several problems to be considered, including the lack of such things as a total systems approach, school-university-community coordination, and universally accepted criteria regarding good teaching. A second phase of training complex development saw four new complexes developed with \$50,000 annual funding each, and ten mini-grants of \$15,000 per annum given to Elementary Education Models to help them develop centres.

Another EPDA project, Educational Renewal, attempted to develop over 200 teachers' centres across the country. The National Centre for the Improvement of Educational Systems (NCIES) was established to administer the program, designed to reform the schools of the nation (Schmieder, 1977). However, the 1972 Congress stopped the plans, and the American dream of a massive installation of centres was curtailed.

And massive it was to be - with as many as a thousand renewal sites originally projected for 1986, then with a scaled-down model of two hundred sites, that were to obtain \$50-\$85 million in fiscal 1972. Miles (1975a) points out that

this large-scale development process between the U.S. Office of Education and major teacher preparation institutions led to a very wide interpretation of centre functions. It also presumed a policy of parity in governance, with no one group (including teachers) able to exert primary control. Finally, it offered considerable funding for projects (such as those mentioned previously) that were mainly in the interest of teacher-preparation institutions already in effect.

More recently, there has been a change in the national involvement in centre development. The National Teacher Centre Program of 1976 gives teachers a central role in planning, developing and implementing projects under a new grant program, with initial funding of \$75 million annually (Office of Education, 1978b). Lauded by the National Educational Association as a program designed to truly turn over "design and control of in-service education from state agencies and higher education institutions to the teachers themselves" (NEA, 1977a), and by the Office of Education as a means of linking "the creativity of every classroom to every other classroom" (Lovett & Schmieder, 1977), there still remain several factors within the system that will keep the British-type teachers' centre from becoming a reality in the U.S.A..

Whereas British centres are aimed primarily at curriculum development (Mulhern, 1976), the new U.S. National Program is aimed mainly at helping teachers to deal with current classroom

instructional problems; and while the British centre is generally a physical place - a central location for activities - the centre under the Teacher Centre program is seen as a series of projects located primarily as close to the classroom as possible, with no provision made for establishing central offices.

Finally, despite the provision for teacher control, the Program requires collaboration among many groups: teachers, teachers' organizations, higher education, special education, vocational education, the school board and the state education agency (O.E. 1978a).

Teachers' Centres in Canada

In Canada, the development of teachers' centres follows both and neither the American and British patterns. The literature contains very little about the Canadian experience, and most of what there is is written by teachers' associations in support of the centre movement in their own provinces.

While not having a National Office of Education as in the U.S.A., neither do Canadian school districts have the essential autonomy of the British LEAs. Each province functions much as the American O.E. and has a considerable range of power. Local school districts foot most of the educational bill, and so they, too, hold considerable power. Since Canadians do not have available to them the large number of foundations that the

Americans do, sources of financing for teachers' centres are limited, and, generally, teachers must anticipate cooperation with a school district as a prerequisite for centre development. The important point here is consideration of where control will lie. In establishing a true teachers' centre,

the local officials are often being asked to relinquish a substantial portion of their control over in-service activities. Furthermore, they are being requested to give control directly to the teachers and to help pay for some, if not all the costs involved. (Cassivi, 1978, p.26)

All centres in the Atlantic Provinces have the express support of the local board and its staff, but all are run by teachers, with a heavy emphasis on volunteer work, and all have Boards of Directors comprising only teachers (Cassivi, 1978). In the Atlantic Provinces, then, is an example of the concept of the British centre translated into a Canadian structure, but maintaining much of the meaning of the original, as set out in an earlier section.

In 1973, the Ontario Teachers' Federation (OTF) and the Ontario Institute for Studies in Education (OISE) held a conference in Toronto designed to "implant the seed of the teachers' centre concept" (Oliver and Wees, 1973, p.5). However, in a 1976 study, the OTF reported that

nowhere in this province has a school board funded a teachers' centre governed and administered by an independent board of directors, the majority of whom are teachers elected by teachers. Nowhere in Ontario have educators and elected officials decided to have faith, to embrace the concept, to be determined that it shall work. (OTF, 1976, p.1)

There are many teachers' centres in Ontario, however, under the management of the school districts.

Manitoba has several teachers' centres, operated by teachers in cooperation with their school boards. It is interesting to compare initial funding of \$2000 to \$3000 in many of these centres with the \$50,000 that the U.S.O.E. called a 'modest' allowance for its training complexes. The basic philosophy of Manitoba centres is that

teachers' centres must be established and governed by teachers. It is this aspect that sets teachers' centres apart from other vehicles that have been utilized for continuing education. (MTS, 1976)

Professional Development Committees, already strong in the province, play a large role in the centres. Some centres are funded entirely by school boards, and others rely on Departmental Rural Education Alternatives Program monies. Steering committees are generally controlled by teachers, even though administrators and board officials occasionally sit on these committees. There are some centres that do not have steering committees and which may be more directly under the control of superintendents, but MTS policy supports teachers'

centres and continually pushes for board and Ministerial support.

Centres in Alberta and British Columbia are not highly publicized but appear to be trying to embody the British concept, even though they face a major stumbling block:

Teachers are not routinely given control over any portion of their profession. In an educational system which traditionally presumes system-wide implementation of upper-echelon-approved curricular pronouncements, revisions and bandwagon approaches (with little or no prior teacher appraisal), an innovation combining continuing staff development and local curriculum development by those to be implementing such changes must be seen as a dangerous threat. Some provinces have found the solution - what better way to minimize the danger of incorporating the teachers' centre concept than to cut out the creative, idiosyncratic (power-dispersing) element? (Osoba, 1978, p.11)

Purpose of the Study

Thus, although teachers' centres are seen by many groups in Canada as being preferable to almost any other form of in-service, a lack of systematic data exists concerning what is going on in Canada, and there is no real conceptual base on which to effect a comparison. Furthermore, little is known about how teachers' centres meet the needs of teacher in-service development, professional growth, and innovation in educational practices.

It is the purpose of this paper to develop a conceptual model, based on current literature, of a teachers' centre that

would maximize the meeting of these needs.

A second purpose is to examine Canadian centres in light of this framework, looking specifically at the underlying organization, policy, and philosophy of centres across the country, the extent to which they fit the guidelines developed, and the implications that these findings have for teacher centring in Canada in the future.

Limitations of the Study

An attempt was made to survey all the teachers' centres that are listed through the provincial teachers' associations or the Canadian Teachers' Federation. The study is therefore limited by a reliance on local definitions of teachers' centres - places may call themselves teachers' centres when they are essentially resource centres, and other places that are truly teachers' centres may have been omitted from a provincial list for any of a number of reasons. Critical questions on the survey can help to eliminate the first problem, but the second one is essentially impossible to eliminate.

A further limitation is imposed on the study by the problem of terminology. Each region has its own phrases for specific activities, and while precautions were taken to try to ensure that the questionnaire was as unbiased as possible in this regard, it is impossible to guarantee that this was so, especially in the part of the study that analyzes

self-perceptions of effectiveness in programming.

Terminology

For the purpose of this study a TEACHERS' CENTRE is defined as a physical facility operated principally by teachers for the purposes of teacher in-service education, enhanced teacher professional interaction, and curriculum development. (This definition is developed in the literature review, as given in the next chapter.)

STAFF RETRAINING refers to programs offered for the purpose of allowing teachers to develop skills that will permit them to move from an area of low staffing needs to an area of higher staffing needs.

CURRICULUM refers to that which is taught in a subject area, rather than to that which is prescribed. It is used to encompass the full range of a teachers' programming for the students.

PROFESSIONAL DEVELOPMENT is used in the sense of client-related activities, rather than in job-related activities.

Outline of the Study

Chapter II provides a review of the related literature, which examines the underlying assumptions and basic philosophies of, the organizational structure of, and the services offered by various types of centres. Chapter II also looks at the issues of finance and control and describes a theoretical framework of a teachers' centre, as developed from the examination of the literature.

Chapter III describes the survey instrument used, the population sampled and the data collection methods used in the study. Chapter IV gives an analysis of the data, and Chapter V compares centres with the theoretical framework presented in Chapter II. A summary of the findings, conclusions and recommendations are presented in Chapter VI.

The appendices provide information about the questionnaire used, a list of the centres surveyed and an overview of the defined and implicit roles of the centres and any developmental and/or research activities that they are involved in. In addition, there is a complete breakdown of the raw data.

II. Review of the Literature

The Review

The literature pertaining to teachers' centres was examined for the purpose of developing a theoretical framework for the teachers' centre that would maximize professional growth and innovation in education. Most papers addressed one or more of four basic areas: definition, underlying assumptions, control, and basic services. Within each of these areas, some factors pertinent to the operation of centres were identified, and these have been drawn together to form the theoretical model used in the study.

Defining the Teachers' Centre

Throughout the literature, one idea emerges constantly: that each teachers' centre, regardless of the form it takes, is individual, and that rather than representing a generic concept, the term encompasses a variety of distinctive situations (Yarger and Leonard, 1972). W.L. Smith (1974) expresses this idea succinctly.

Each centre bears its own distinctive trademark. This is a positive quality, for if there is one thing we do know, it is that each school district, even each school, has problems and strengths peculiar to its own unique

set of circumstances. (p.2)

Despite this, it is still possible to define the teachers' centre in both physical and conceptual terms. It is generally, (though not universally: Cronin, 1977a), agreed that a centre should be a physical entity. Once the place is established, its exact form, and what takes place inside it varies considerably, but first there must be a place that is designated as a centre (Biggs, 1974; Cassivi & Marriott, 1974; Parsons, 1974; Yarger, 1974).

Conceptually it is more difficult to define the teachers' centre, but the term itself implies that it is a place where professional development of teachers is concentrated, and that it is principally for teachers. Thus, all facets of education - program and materials development, instructional techniques, research, educational reform, discussion of critical issues - rightly belong in a centre (Harris, 1975; U.S. Public Law 94-482, 1976; Cronin, 1977a; MTS, 1978); as do all aspects of teacher growth and professional development - consultation services, retraining and upgrading, workshops in areas of curriculum and methodology, and long-term professional development activities aimed at continuous improvement of the system as well as the teacher (Yarger, 1974; Miles, 1975a; ATA, 1978a).

More than that, a teachers' centre is a place where teachers can grow professionally, become more aware of their

abilities, and improve themselves in areas of weakness, whenever they feel the need. It is also a place where teachers can meet with other teachers and share ideas (Makurat, 1975), where they can find the means of coping with day to day problems (Jeffries, 1974), and where they can become more involved in the broader scope of educational development if they so wish (DeVault, 1974). Buxton (1975) summarizes:

I refer to the type of teachers' centre where a teacher can come voluntarily to become... both a spectator and a participant, deepening his view and understanding of the world on one hand, and, on the other, refining and enlivening his communication of it to his students (p.147).

Thus we can form a definition of the teachers' centre as the first proposition presented in the theoretical model:

Proposition 1: A teachers' centre is a physical facility operated principally by teachers for the purposes of teacher in-service education, enhanced teacher professional interaction, and curriculum development.

This definition eliminates places that are strictly resource centres or material dissemination centres. To be truly a teachers' centre, in-service training must occur. Moreover, the centre must be a physical facility - a place where these activities can occur, a place where teachers can

drop in for help, or just drop in to work, a point of continuity that is there when the teacher is ready for it.

The Underlying Philosophy and Assumptions of the Teachers' Centre

Feiman (1977) notes that there are three approaches towards in-service education as it affects teachers' centres in the literature: behavioural, humanistic, and developmental. The first of these types, behavioural, is typified by the consortia-type of centre, which often attempts to provide a base for expanding competency-based/performance-based teacher education (Tanner & Denmark, 1972; E.D. Smith, 1974) where outcomes are described in terms of specific teaching behaviours. The philosophical base of such centres is that educational problems can be solved by technology, and that they should be directed by experts in the field (Feiman, 1977). This view has a fair degree of support. Clark (1974) feels that a model of the effective teacher can be developed, and Covert et al (1974) note that most decisions about what skills should be improved should be made by school administrators. McGeoch & Quinn (1975) feel that administrators are capable of program development and have insight into teachers' needs, and E. Brooks Smith (in Kaplan, 1974) stated that the teacher-dominated programs became circular and impotent. However, Covert et al (1974) also noted that the groups most favourable to the type of training

conducted at the Rhode Island Teaching Centre were the superintendents and administrators, while Bender (1974) terms such centres monuments to paternalism.

Such consortia-type centres do not appear to exist in Canada, even though there is a predominance of district-run centres, and, since they are primarily concerned with pre-service training, they are not really pertinent to the question at hand, which is an attempt to analyze the in-service role of teachers' centres.

The humanistic and developmental centres operate on the basis of a precept that is found in the literature on education at all levels: You don't learn anything completely unless you are deeply involved. This is encompassed in the proverb: "I hear and I forget, I see and I remember, I do and I understand", (in Silberman, 1971). This philosophy has become part of many learning situations in recent years, with many alternative education programs designed to provide more direct student contact with the principles that they are learning. Yarger & Schmieder (1978) note that this tenet works equally well with teachers as with the students that they teach. In discussing the new DHEW grant program for teachers' centres, they point out that no matter how educationally sound, imaginative, and innovative a program is, unless the teachers that are responsible for the delivery of the program have a clear understanding of the principles involved, then it is highly

unlikely that it will be implemented effectively, or that a sustained effort will be made to guarantee the long-term processes necessary for genuine change.

Landsmann (1975) postulates that any innovation requires the perception of a need. Bishop (1976) defines processes by which

needs become objectives and objectives become programs, facilitating the growth of those charged with meeting the various responsibilities and the learners for whom they are responsible (p.15)

as being the general objectives of staff development. Makurat (1975) points out that the classroom teacher is in the best position to identify the needs of that classroom and the students in it, and to make decisions regarding curriculum and classroom activities. Major benefits in learning, he argues, arise from the choosing of goals and activities directed at choosing those goals. Further, it has been said that personal and professional growth are significantly advanced only when those involved in growth activities participate actively and meaningfully in problem-solving, policy setting and process development (National Education Association, 1978; Wideen, Hopkins & Pye, 1979).

It is beyond the scope of this study to delve extensively into the psychological bases for change, but if teachers' centres are to be a base for innovation in education, as well as for professional growth, some understanding of what is involved

in the implementation of new programs is necessary. As noted in the introduction to this study, Sputnik in 1958 caused an acceleration in the rate of change in education (Miles, 1964). Miles also notes that most of the time, money and energy available for change is funneled into the development of innovations, rather than examining and planning the process for change. Planned change, says Bennis (1969) involves a linkage between theory and practice, "mutual goal setting, an equal power-ratio and deliberateness on both sides" (p.769), and that

the more profound and anxiety producing the change, the more collaboration and closer relationship is required. In addition, we can predict that an anticipated change will be resisted to the degree that the client system possesses little or incorrect knowledge, has relatively little trust in the source of the change, and has comparatively low influence in controlling the nature and direction of change. (p.779)

Bailey (1971) feels that educational reform also requires a strong commitment on the part of the classroom teacher, and this commitment, he says, is not easy to come by. It will come, he feels, only when teachers themselves are responsible for "defining educational problems, delineating their own needs, and receiving help on their own terms and turf" (p.146).

This statement has been quoted and repeated in many articles originating in Canada (Alberta Teachers' Association, 1978b; Manitoba Teachers' Society, 1976; Marriott, 1978), England (Nist, 1977), and the U.S.A. (Feiman, 1975; Estle & Christensen, 1977; Meridian Public Schools, 1977). It has

become a basic understanding in the teachers' centre process, and although there is not a lot of research within the literature (Joyce, 1979), much of what there is supports this view.

As early as 1957, Parker, in the National Society for the Study of Education Yearbook, gave as basic guidelines for in-service education, among others, the concepts of working on problems that are relevant to the people doing the work, involvement in goal formulation and planning by the clients, and an atmosphere of mutual respect.

The National Foundation of Education found in a 1967 survey that one-quarter of the teachers questioned had not participated in in-service activities because of the lecture method of delivery used, and because of the lack of relevance to the classroom (reported in Nist, 1977).

In a study of British teachers' centres, McKeegan (1977) found that school-based and teacher-based curriculum emphases were preferred over "top-down" types of curriculum programs, and Tretham (1977) reported on a Phi Delta Kappa study of Professional Renewal that showed that highly regarded in-service programs were, among other things, voluntarily and cooperatively planned.

A South Dakota survey on teacher preference concluded, from over 1000 responses, that the most preferred type of in-service builds on teachers' interests and offers a choice in the matters

of focus, time of presentation and resource personnel. A preference was also shown for in-service that involved teachers learning from teachers (Zigarmi, Betz & Jensen, 1977).

A 1975 analysis of 97 studies on in-service, outlined in a B.C.T.F. Professional Development Advisory Committee report found that the most effective in-service activities are those in which, among other things, teachers participate as planners and helpers, in which their role is active rather than passive and in which they choose their own goals and activities. This was also reported to be the case by a Rand Corporation study (Devaney, 1977), which looked at the difference between federal change agent projects that have disappeared and those that have lasted. Successful change projects support teachers, emphasize local intervention rather than implementation of pre-packaged programs and take the stance that teachers must be "collaborators rather than targets". These projects were also based not so much on a specific program, as on a point of view that explicitly acknowledged teachers as professionals. The study also noted the existence of a teacher centre as a base for useful peer interaction as one tangible sign of a commitment to this point of view.

We come then to the realization that teachers change their way of doing things, or are willing to implement new practices when they have considerable input into the process, and not when "imperious, theoretical reformers (educrats) ... tell them to

shape up" (Bailey, 1971; also in Biggs, 1974; Brand, 1975; Feiman, 1975), and when they have a high degree of commitment at the outset (Fullan, 1979).

Bennis (1969) notes that implementation involves an understanding of the change and its consequences, a voluntary effort towards change and emotional involvement - rational persuasion by outside experts is insufficient.

This does not imply total isolation by teachers from the 'outside experts', though, but rather a process where all involved work together, functioning as colleagues exchanging ideas, rather than as experts training the ignorant (Devaney, 1977).

Regardless of whether teachers or others initiate a change, implementation involves a process of adaptation and internalization, and finding the best fit between a good external idea and local conditions (Fullan, 1979). And if outside agencies are to attempt change, they must ensure that they are not perceived as, nor in fact are, transients that cannot be depended upon (Sarason, 1971).

Many writers have expressed the belief that when teachers define their own problems, determine their own needs and receive help on their own terms, rather than being encumbered with 'teacher-proof' curriculum that has little relation to their needs as they see them, then outside expertise becomes support and not coercion, cooperation and not imposition. With this,

the in-service efforts that have failed because of their lack of direction towards the teachers' most urgent needs (Parsons, 1972; Ayles et al, 1977; Lovett & Schmieder, 1977) can be turned into a problem-solving approach towards professional development, in which teachers can call on outside services and support in helping them to cope with their professional needs (Kahn, 1975).

The preceding section has argued that the assumption that teachers need, and want, to be directed and controlled by more highly qualified experts is invalid in terms of in-service training. It is valuable at this point to look at the concept of teacher as a professional. The possession of common practice and understanding is a main factor in defining a profession, together with the performance of an indispensable personal service, possession of a high degree of technology and a considerable degree of autonomy (Sieber, 1968). But he also notes that while teachers do not have the high degree of autonomy desired, they often reject innovations as restricting their autonomy, and as threatening their self-image as an 'expert'. Lortie (1975) notes the same points, as does Coleman (1960), who also points out that teachers must come to grips with the problems of professionalizing education - of setting themselves apart, establishing standards of training and practice, of regulating their own affairs and of establishing a broad base of knowledge - before they can truly achieve

professional status. But, Devaney (1976) feels that if the responsibility for their own development is to be turned over to teachers, then it is necessary to assume that they are more than educational technicians; that they are professionals who can and want to assess needs, and to plan, implement and evaluate programs (Federation of Women Teachers' Associations of Ontario, 1974).

The developmental teachers' centre provides a base for such a philosophy by looking at the client as a professional requiring and desiring support; one involved both in deciding what is needed and in providing it (Kahn, 1975). And participants in such centres are generally volunteers that are hungry for a change; that wish to keep in contact with each other; that can, and do, select priority areas and show enthusiasm and determination in the areas of self-growth and development (Raskin, 1974; Ellison, 1975; Burrell, 1976; MacLaren, 1976; Yeatts, 1976).

Good teachers, it has been said, want to become better, and, given the opportunity, will take the responsibility for improving themselves and, consequently, education at all levels (E.B. Smith, 1974; Levin & Howitz, 1976; Kahn, 1978). And teachers are shown to be seeing themselves more as professionals, with the development of that professionalism needing the provision of sustenance beyond 'make-and-take' workshops to an integration of theory and technique and a full

understanding of the processes involved (Landsmann, 1975; Marriott, 1975, Rogers, 1976b).

For a centre to be successful, then, and not just another base for the ineffective type of in-service mentioned earlier, it must accept the teachers as professionals and help them to move to a full professional involvement in the process of education. Thus the following three statements are presented as being underlying philosophical assumptions necessary to the running of an efficient centre:

Proposition 2: Fundamental educational reform originates with the classroom teacher.

Proposition 3: Outside experts can assist but not instigate.

Proposition 4: Teachers desire professionalism.

The Services of the Teachers' Centre

Both the descriptive and the prescriptive literature discuss services that are and services that should be offered in the teachers' centre.

As mentioned earlier, many centres in the United States are directed at establishing a partnership between school systems and preparing institutes for the purpose of developing initial teaching skills and advanced expertise (Collins, 1970). Such centres are often clusters of schools closely aligned with

colleges of education (Boucher, 1975) and are designed to facilitate interaction between teachers and all other major groups in the field of education (Crosby, 1974). They can provide on-site consultation and individualized courses while updating in-service teachers in theory and methods (Evans, 1975; District of Columbia Teachers' College, 1967; Drumm, 1976).

Some of these centres are seen as facilitating the implementation of competency-based teacher education (CBTE), where the centre is a system that sets up and implements the field experience component of a teacher education program (Parsons, 1972; Andrews, 1975; McGeoch & Quinn, 1975). Nyquist (1975) cites 4500 different CBTE programs in the United States, and Howey & Hayen (1975) note that the function of these teacher/teaching centres is to identify common priorities of the school and the university systems and to jointly design projects and programs of pre- and in-service, and of curriculum development. Covert, in his studies of the Teacher Centre Pilots (1974), states that one of the major program objectives of the Rhode Island Teacher Centre was to increase the amount of field-based instruction for teachers, and Beach & Mosley note a similar objective for the Fort Worth Teacher Centre (1977).

The American Association of Colleges of Teacher Education (Pomeroy, 1977) feels that the colleges have a responsibility to "develop and disseminate the professional culture through every mechanism possible, including the teacher centre", and sees the

centre as a device designed to deliver college and community resources.

There are also many centres in the U.S.A. that are directed solely to providing services for practicing teachers. Feiman (1975) notes that one such centre functions most prominently as a curriculum workshop and resource area, and many other observers of centres have noticed a similar pattern: with resource work and the dissemination of information; workshops, working parties and seminars; the exchange of ideas and discussion; and staff-support systems forming the base of most centre operation (Harris, 1975; Cassivi & Marriott, 1974; Arnold, 1975; DuShane, 1975; Ellison, 1975; Bolam & Porter, 1976; Levin & Horwitz, 1976; MacLaren, 1976; Henry, 1977; et al).

But in addition to the case studies of centres and the programs that are in place, there is considerable literature that prescribes services that should be offered. These tend to be primarily curriculum development (British Schools Council, 1969; Matthews, 1973; Burdin, 1974; et al), research (Marsh, 1974; Lortie, 1978; et al), the integration of theory and practice (Estle & Christensen, 1977), the professional growth of teachers (Collins, 1974; Yarger, 1974; Coleman, 1976) and educational reform in general (Bailey, 1971; Joyce & Weil, 1973; Fibkins, 1974; Yarger, 1974; ATA, 1978b).

Devaney (1977) makes the point that, in a broad sense, the function of the centre is to encourage teachers to grow in their profession and remain open to new educational innovations. And, as early as 1973, Thornbury mentioned the necessity of encouraging teachers to go beyond the search for day-to-day solutions, and noted that in-service activities could be used as the carrot to attract teachers to curriculum development and educational research. Cassivi (1978) feels that

the only feature of a teachers' centre that makes it deserving of even a second glance is that it strikes at the root of educational reform. (p.24)

Three more statements can be added to the model, then, in conjunction with the the findings drawn out in the previous section, these presenting the core of the services that should be offered by a teachers' centre, regardless of the type:

Proposition 5: Teachers' centres should offer extensive in-service activities for the professional development of teachers.

Proposition 6: Teachers' centres should provide a materials source, both for manipulation and dissemination.

Proposition 7: Teachers' centres should be the base of extensive research and developmental activities.

Administration, Finance, and Control of the Teachers' Centre

The biggest debate in the literature arises over the issues of finance and control. Yarger (1977) points out that except for Federal Government programs, there is little or no institutionalized financial base for in-service in the U.S.A., and that the existing Federal programs are subject to termination at any time. Funds for training and retraining teachers, says Raskin (1974), have always been scarce in American education, where school boards have a tradition of spending more freely for visible buildings than for less tangible items, and it is more difficult still to get funds for training that is based on unfamiliar notions, as teachers' centre workshops sometimes are. Moreover, the support services available to assist the teacher have not kept pace with the increasing responsibilities and demands made on the individual teacher (ATA, 1976).

However, as noted in the previous chapter, there is a need for in-service, and if centres are to become a base for that in-service, then they need financing.

In England, centres are financed by the LEAs (Local Education Authorities) and the facilities, staffing, equipment and release time for teachers all form part of the budget. A common element of the teachers' centre in England is that each has "local physical facilities and self-improvement programs organized and run by the teachers themselves for the purposes of

upgrading educational performance" (Bailey, 1971). Its strength, it is felt, lies in its local and flexible nature. It may be complemented by national and regional centres, but it fills, for its own area, needs for continuing education, a materials centre and a place for social contact (Nist, 1977).

In the U.S.A., centres are more frequently tied in with a university or state school system, or funded by a federal grant, and financing is on a different level. Davis (1975) said that when one talks about alternatives in education one is really talking about the issues of governance and the sharing of power. And since the funding for American centres is usually from university groups, educational laboratories or consulting agencies, there is a problem of how much voice each participating group will have (Boucher, 1975), and the fact of accountability has put pressure on the administrative groups to continue to hold the power (Wright, 1974).

Pilcher (1974) points out that a further difference exists between the British system, which considers its teachers to be the experts in matters pertaining to the classroom, and the American system, which is based on outside expertise, despite the generally proven inability of these groups to effect change in the school system (Lovett & Schmieder, 1977). It is more difficult, therefore, he notes, to achieve teachers' centre independent alike from academic advice, community criticism, and the administrative superior/subordinate attitude in the U.S.,

where the teacher has less autonomy and university leaders, community spokesmen and school administrators can exert greater pressure. Thus power stays in the hands of groups that are sometimes several steps removed from the classroom, and since teachers are often skeptical about the ability of such groups to meet their needs as they arise from the classroom, teachers' centres face a problem of credibility.

There are centres in the U.S.A. that are completely independent of government financing, and these are the 'grass-roots' centres that are generally financed by user fees or foundation grants. They, and the British centres that they are modelled after, typify a cooperative division of finance and administration. The British centre, while being financed by the LEAs, is controlled by teachers, sometimes to the exclusion of any administrative input (Thornbury, 1974). The 'grass-roots' centres in the U.S.A., being grant sponsored, are managed by the teachers who designed them. Thus money is available for teachers to run the kinds of programming that they feel will be beneficial to them as professionals (Devaney, 1976). However, grants generally run on a limited time factor and are less than ideal in the long run. In one American 'grass-roots' centre, Teachers' Active Learning Centre, the directors found that "we were exhausting ourselves looking for new money (as their Ford Foundation grant ran out); it ... is an incredible drain on the staff and makes us less effective in our real work - helping

teachers" (Raskin, 1974, p10).

In Canada, most centres are part of a school district, with some degree of financing from the district. Crosby (1974) feels that teachers' centres should be developed as a local responsibility, and that centre programs should follow local guidelines and be responsive to local needs. But management must not be left entirely in the hands of the board and its administrative staff, merely because it is providing the financing. The centre and its programming must be for teachers, and not subservient to administration (Oliver and Wees, 1973). In a 1976 booklet on teachers' centres, the Manitoba Teachers' Society stated that the centre must be established and governed by teachers, for only by that is it any different from myriad other vehicles for in-service. Further, they must maintain majority control of any decision-making body.

Monies provided to a centre should be considered more in terms of a grant given to help run a specific type of program than as an expenditure requiring item by item accountability, and the budget should be in the hands of the centre finance committee or its equivalent, who are accountable for the success of the operation. The ultimate objective of all in-service is the improvement of instruction, and according to the National Educational Association (1974), the cost of providing opportunities for continuing in-service education is a "cost of doing business", and teachers should not be required to rely

exclusively on expenditure of their own funds to maintain or improve job competency. The situation, they feel, is analogous to the scientist-inventor whose work, on institutional time, results in institutional patents. Since a common practice and understanding is the coordinating mechanism of any professional organization, on-going training is necessary for all its members, in order to ensure a standard of knowledge.

Lovett & Schmieder (1977) note the considerable potential of teachers' centres under the new Grant program for reforming in-service education and effectively utilizing research findings. They can also provide the means for meeting the needs of the educational community in terms of declining school enrollment and an aging and declining teaching body, with the consequent need for retraining to implement many special education programs in regular classrooms. But American centres are supported by Federal funding, and such funding is not available in Canada. The Manitoba Teachers' Society (1976) notes that "teachers cannot be expected to make unlimited and unrealistic commitments on a continuing basis. The school system must begin to provide the monies to support Teachers' Centres" (p.28).

Who, then, should have control? The British Schools' Council (1967) takes the view that there must be no hierarchy of initiative or control, but rather a situation where everyone involved in the centre is a student of teaching, and might, as

Boucher states (1975), find himself at different times at one or the other end of a continuum. Owen (1975) also feels that programming cannot be either LEA prescriptive or left entirely to teachers. The OTF (1976), on the other hand, argues that professional development of teachers and the development of local curriculum can best be accomplished if they are placed as an act of faith largely in the hands of teachers, while E.D. Smith (1974) argues that the state should be highly visible in centres.

There is, however, very little literature available on cooperation and shared decision-making, and what little exists is mostly advocative rather than analytic (Yarger, 1977). Coleman (1975), in describing the St. Boniface, Manitoba experience, notes that the school district provides the funding for the centre and consequently demands an accounting of its proper use. But the Steering Committee of the centre, which comprises a majority of teachers, is responsible for satisfying the professional and program development needs of the teachers in the district through the centre, and in doing so, meets the accountability requirements of the board.

Nicholson and Joyce (in Yarger, 1977) attribute increased attempts at collaboration to two factors. First, there is a belief that there are too many factors to be considered in the development of in-service programs for any single group to be able to deal with effectively. Second, the current political

struggle over control of teacher education has led to attempts at collaboration as a means of resolving the crisis.

Teachers, as stated previously, are most likely to attend those programs that they feel to be pertinent, of immediate as well as of long-term practicality, and designed to meet their own, not district needs (Edelfelt & Darland, 1972; Kemble, 1977). Teachers' centres, then, with a proper division of power, can become an expression of teacher control over their professional destiny (Howey, 1976), and thus represent, as DeVault put it (1974), one more situation in which societies are creating institutions designed to serve participants on their own terms. Centres can protect the rights and needs of participants to plan and run their own programs, by providing in-service education programs designed by, and for, teachers, since, as previously shown, more comprehensive teacher participation results in more effective in-service (San Jose, 1978; McPherson, 1979; Witkowsky & Cronin, 1979).

Thornbury (1973) states that attempting educational reform without the direct involvement of teachers is futile, and Rust (1973) agrees that change can only occur if a genuine responsibility for the changes to be made rests in the hands of those who are responsible for carrying it out. With a strong commitment on their part, teachers are more likely to carry out new concepts and methods in education (Yarger and Schmieder, 1978). As Arnold (1975) stated, the teachers' centre tries to

take all opportunities, a situation developed only from a real partnership, understanding, and reciprocal respect.

This implies a major facet of the administration of a teachers' centre: that teachers, as clients of the centre, must have a stake in it, and there must be a strong voice by teachers, and not just an authoritative imposition of curriculum (Thornbury, 1973; Davis, 1975). In fact, the 1978 DHEW Grant Requirements demand that teachers have maximum control, and Witkowski and Cronin of the Illinois O.E., (1978) agree that the teacher being served is to be centrally involved in planning, developing and implementing programs. This sentiment is echoed by the Alberta Teachers' Association, (1978b): teachers must be involved in all aspects of organization and decision-making, from planning to implementation and evaluation.

To ensure that this happens, teachers themselves must be able to provide the primary motive power for their own in-service, and programs can then be designed to meet their perceived needs (British Schools Council, 1967, 1969). A centre could then maintain integrity but, with monies from the school district within which it is based, still have a reliable funding base (Rogers, 1976b). It could be an intrinsic part of the district's educational program, while providing services to those for whom it is designed - teachers. It could provide more effective in-service by allowing more comprehensive teacher participation and self-determination (San Jose, 1978), and may

thereby contribute to the goal of genuine change in the education of students (Rogers, 1976a). The last propositional statement, then, in the proposed model relates to finance and control:

Proposition 8: The teachers' centre should be run by teachers and for teachers, and should be financed by the school system in which it is located.

The Theoretical Model

As noted at the beginning of this review, several factors emerged as being fundamental to the development of teachers' centres as effective bases for growth and innovation in education. The eight propositions given above form the basis of the theoretical model used in the study that follows. In addition, a central theme is proposed:

The prime focus is the classroom teacher.

Table 1 below sets these propositional statements up as a cyclical model.

Table 1: A Theoretical Model of the Teachers' Centre

DEFINITION

The teachers' centre is a physical facility operated principally by teachers for the purposes of teacher in-service education, enhanced teacher professional interaction and curriculum development.

<p>A S S U M P T I O N S</p>	<p>Fundamental educational reform originates with the classroom teacher.</p> <p>Outside experts can assist, but not instigate.</p> <p>Teachers desire professionalism.</p>	<p>THE PRIME FOCUS IS THE CLASSROOM TEACHER</p>	<p>Centres should offer extensive in-service activities for the professional development of teachers.</p> <p>Centres should provide a materials source, both for manipulation and dissemination.</p> <p>Centres should be the base of extensive developmental activity.</p>	<p>S E R V I C E S</p>
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The teachers' centre should be run by teachers and for teachers, and should be financed by the school system within which it is located.

FINANCE AND CONTROL

Summary

This chapter has reviewed the literature with the intention of developing a set of propositional statements that could be combined to form a theoretical framework of a teachers' centre that would maximize the functions of professional growth and educational innovation. Nine propositions were formulated, and these formed the basis of the questionnaire that was used in the study survey. The next chapter presents the means by which the survey was undertaken.

III. Research Methodology

This chapter describes the procedure used to address the second phase of the study. A description is given of the population and the sample of Canadian teachers' centres that were surveyed providing an examination of the underlying organization, policy and philosophy of centres throughout Canada. In addition, the questionnaire that was used to conduct the survey, the data collection procedures, and the methods by which the data were analyzed are discussed.

Population and Sample

The intended population included all teachers' professional development centres in English-speaking Canada. The Canadian Teachers' Federation and the provincial teachers' associations of British Columbia, Alberta, Manitoba, and Ontario, along with the Atlantic Institute of Education's Lighthouse Learning Project, were contacted and asked to provide information concerning teachers' centres. Seventy-six centres were identified through this procedure. They made up the sample.

The Questionnaire

In order to gather data about teachers' centres in Canada and to determine the extent to which they fit the theoretical model presented in Chapter II, a questionnaire was developed based on the literature review. Various sections on the questionnaire were further developed following consultation with the personnel of several professional development and resource centres in the Lower Mainland area of British Columbia. Once written, the questionnaire was examined by the director of a professional development centre and by others knowledgeable in the field of in-service, and alterations were made to help reduce any ambiguity.

The questionnaire has seven parts. In the first part, respondents were asked to note the extent to which several policy statements applied to their particular centre. Parts B, C and D looked at centre usage, staffing and facilities respectively. Part E examined centre programming and priorities, F, decision-making, and Part G asked for short answers concerning the centre role, and processes of needs assessment, developmental activities and research. A detailed account of the development of the questionnaire, and a copy of the questionnaire itself are included in Appendix A.

Data Collection

Seventy-six centres in fifty-two school districts were identified as fitting the definition of a teachers' centre, and were sent the survey questionnaire with a covering letter (see Appendix B), a stamped, self-addressed envelope and a label that could be filled in by those requesting a copy of the survey results. The first mailing was done in September, 1979. Forty-one responses (54%) were received at that time, four of which indicated in their reply that they were not teachers' centres. Two other questionnaires were returned, not having been delivered.

In late December, 1979, a second copy of the survey was mailed to the thirty-three centres that were still unaccounted for, with a second covering letter (See Appendix B). Nine more centres responded, with eight returning completed questionnaires, and one more indicated that it did not fit the definition of a teachers' centre.

In January, 1980, telephone calls were made to the twenty-four centres still on the list. Eight numbers were not in service, and a further six numbers were unavailable due to a labour dispute at Bell Canada offices in Ontario. Of the ten centres contacted at this time, three indicated that they were not professional development centres, and one provided the needed information over the phone. Three further completed responses were received as a result of the telephone calls.

Of the forty-nine centres that sent completed questionnaires, three were not professional development centres, leaving a total response of forty-six. Therefore, of the original sample of seventy-six centres, twenty-one were eliminated as noted above. Nine centres did not respond at all, including three that had indicated over the telephone that they would complete the form. Thus fifty-four professional development centres were ultimately identified for the sample, and eighty-four percent were returned.

Table 2 below outlines the sample and response statistics for each region, as well as for Canada as a whole. In the table, the original sample refers to those centres that were sent the first letter and questionnaire. The revised sample represents the number of centres that met the criteria of being a professional development centre as established in the definition given in Chapter I.

Table 2: Sample and Response Statistics

REGION	ORIGINAL SAMPLE	REVISED SAMPLE	NUMBER OF RESPONSES	PERCENT
B.C.	5	5	5	100
ALTA	3	3	3	100
MAN	20	16	14	88
ONT	43	26	20	77
ATL	5	5	4	80
CANADA	76	55	46	84

Analysis of the Data

All questions were examined at two levels, in order to both examine centres across Canada in general and to determine the extent to which they fit the guidelines developed as a result of the literature review.

First, responses were coded and computer analyzed using the Statistical Package for the Social Sciences (SPSS) to obtain frequencies and means broken down for all centres in Canada, and for the individual regions of British Columbia, Alberta, Manitoba, Ontario and the Maritimes. These frequencies were

tabulated to provide an analysis of centre functions (see Appendix D) and pertinent data were drawn out for discussion in the next chapter. Crosstabulations were made of the responses to the two aspects of programming, priority, and effectiveness.

Second, the responses were analyzed, using criteria from the model developed previously and viewed in terms of how effective the centres perceived themselves to be in the major areas of in-service, and to what extent they matched the nine aspects of the model given in Chapter II. The final results have been both charted and graphed to allow for easier interpretation.

A detailed explanation of the treatment appears in the next chapter.

IV. Results of the Analysis of the Raw Data

In this chapter, the data, given in full in Appendix D, have been analyzed in order to provide an overview of the policy, philosophy, and services of teachers' centres across Canada. Each part of the questionnaire, given in full in Appendix A, is examined separately. In each section, an explanation is given as to how the responses to that particular question were treated, and a series of tables are presented to help interpret the data.

Part A: Policy

Ten policy statements were presented in Part A:

1. The director of a Teachers' Centre should have prior classroom experience.
2. The consultative staff of a Teachers' Centre should be classroom teachers on term appointment.
3. Serious reform is needed in education.
4. Reform must originate with classroom teachers.
5. University personnel can be of assistance in curriculum development.
6. Needs assessment is necessary in order that programs can meet the real concerns of teachers.
7. Teachers' Centres should take the lead in developmental

activities.

8. Teachers' Centres should undertake research studies.
9. Teachers' Centres should be a result of cooperation between teachers, school boards, and the community.
10. Teachers' Centres should be places where dialogue and debate on critical issues in education take place.

Respondents were asked to examine each statement and to compare it with the policy of the centre they directed. The extent to which the statement matched the policy or philosophy of the centre was to be noted by choosing one of 'ALWAYS', 'USUALLY', 'SOMETIMES', 'RARELY' or 'NEVER'.

The responses were analyzed using three procedures:

1. the percentage of respondents answering in each choice area;
2. the priority given across the country to each of the ten statements based on these percentages; and
3. the percentage of respondents choosing 'USUALLY' or 'ALWAYS' for each policy statement.

This last aspect was examined in order to provide an emphasis that could not be as easily demonstrated by the priority tables.

Tables A1 to A6 in Appendix C provide the first part of this analysis. Using the means, it was possible to prioritize the statements according to the degree of support that they received across Canada, and this prioritization is shown in Table 3. It can be seen that the highest priority is given to the policy of having a director with prior classroom experience, and the

lowest priority across the country is given to the policy of undertaking research studies.

An examination of the policy rankings shows that those that are considered to be of the highest priority relate to organizational matters that are relatively easy to implement, while those that are the lowest in the ratings involve some aspects of serious change, and a larger measure of detailed programming. It is easier for a school district to move a teacher into the directorship of a district-run centre than to embark on research studies. This prioritization of policy is basically the same right across Canada, as there were no significant differences found in these responses in the different regions, when they were analyzed using chi square statistics.

Table 3: The Priority Given to Policy Statements Across Canada
Giving the Percentage of Respondents Choosing 'ALWAYS' or 'USUALLY' for Each Policy

NATIONAL RANKING OF POLICY STATEMENTS	% CHOOSING 'ALWAYS' OR 'USUALLY'
1. The director of a Teachers' Centre should have prior classroom experience.	93%
2. Needs assessment is necessary in order that programs can meet the real concerns of teachers.	93%
3. Teachers' Centres should be a result of co-operation between teachers, school boards and the community.	83%
4. Teachers' Centres should be places where dialogue and debate on critical issues in education take place.	60%
5. The consultative staff of a Teachers' Centre should be classroom teachers on term appointment.	65%
6. Teachers' Centres should take the lead in developmental activities.	50%
7. Reform must originate with classroom teachers.	41%
8. Serious reform is needed in education.	26%
9. University personnel can be of assistance in curriculum development.	45%
10. Teachers' Centres should undertake research studies.	23%

NB: The discrepancy between the national ranking and the percentage that occurs in the second last statement is due to a greater response in the 'RARELY' and 'NEVER' categories for this statement than for the two preceding it on the table, and a consequently lower mean.

Part B: Access to and Use of Products and Services

In this section, of the questionnaire, centre directors were asked to note whether or not various groups of people have access to and tend to use the products and services of the centre. The categories of users were:

1. elected board members
2. board office staff
3. classroom teachers
4. substitute teachers
5. student teachers
6. parents
7. students
8. community residents.

The two areas of products and services were examined separately, with hardware and software items that the centre supplies or produces classified as products, and the use of centre personnel classified as services. Note was first taken of the percentage of centres in each provincial region that provides access to the different groups, and, second of the percentage of centres that find that the particular group, given access, tends to use the centre. Appendix C, Tables B1 to B6 provide these percentages.

Table 4 below shows the extent to which groups do have access. Teachers as a group have the greatest degree of access, and even though student teachers have less than any other teacher group, although on the average across Canada, 85% of the centres do allow them to use both services and products. Generally board members and board staff are allowed extensive use of both by most centres across the country, while parents, students, and community groups have limited access.

Actual usage of products and services varies considerably from group to group. Table 4 below also shows the extent to which products and services are used by each of the groups, when given access. Student teachers, even though given less access than substitutes across Canada, show a much greater tendency to use products and services, when given the opportunity. Board members, however, were the only group to show a difference between provinces in the extent of use of services that was significant at greater than the 0.05 level. B.C. centres show very high use by board members, as do the Atlantic Provinces, while Alberta and Ontario report limited use by this group (see Appendix D, Graph B1). Overall, parents, community groups and board members make the least use of services and products available to them.

Table 4: A Comparison of the Percentage of Centres
 Across Canada Giving Access
 to Products and Services to Different Users
 and the Tendency for Different Users to Use
 Products and Services, Given Access

USER	ACCESS		USE	
	PRODUCTS	SERVICES	PRODUCTS	SERVICES
-board members	93%	93%	21%	42%
-board staff	93%	93%	61%	75%
-teachers	100%	100%	100%	100%
-substitutes	96%	93%	57%	56%
-stud. teach.	88%	85%	76%	74%
-parents	50%	68%	35%	47%
-students	54%	54%	56%	72%
-community	54%	63%	45%	64%

N/A responses are not considered in computing these percentages.

Part C: Staffing Structure of the Centre

In answering this, centre directors were asked to provide information concerning the number and designation of staff positions, whether staff were administrative, teaching or clerical, and whether appointments were permanent or temporary.

In analyzing the responses to this part, the staffing structure was broken into three parts: Director, Professional Staff, and Other Staff. (See Table 5 below.) In looking at the directorship of centres, note was taken of those having directors full-time to the centre, those having directors that were part-time to the centre, and those whose position as director was ancillary to other administrative positions within the school district (such as Superintendent of Special Services). Also noted was whether the directors were considered to be administrative, teaching or clerical staff, and the duration of their appointment as director. Generally, the directors tend to be administrative staff, with 42% on permanent appointment to the position. Just over half are assigned full time to the job (60%), and 21% have the job of coordinating the teachers' centre as part of a broader administrative role. The overview of the professional staff shows that only 70% of those centres that do have professional staff (65%) have such staff

assigned full time. This represents less than half the centres responding. Many centres in Manitoba and the Maritimes have to rely entirely on voluntary staffing. However, as will be shown later, in Manitoba, where voluntary staffing is high, teachers have a much higher degree of involvement in decision making. There was a difference between provinces in the use of voluntary staffing significant at greater than the 0.05 level, but it may be that not all centres reported the use of volunteer staff (see Graph C1, Appendix D).

The number of paid professional staff ranges from nil to sixty-three, the latter in a large metropolitan Ontario school district. Most centres with professional staff have teachers on staff, and half have consultants. Many also have other professionals, such as psychiatrists, psychologists, social workers, etc. A few, mostly in Ontario, have administrators on the professional staff in a capacity other than as director.

Almost all centres have clerical and/or technical staff. These are usually secretaries and audio-visual technicians, although some centres have a wide variety of technical and clerical services available.

Table 5: A Comparison of Staffing Patterns
in Centres Across Canada

	BC	ALTA	MAN	ONT	ATL	CANADA
# of centres	5	3	14	20	4	46
<u>DIRECTOR</u>	<u>100%</u>	<u>100%</u>	<u>86%</u>	<u>90%</u>	<u>100%</u>	<u>91%</u>
-full time	100%	33%	42%	67%	50%	60%
-part time	0%	33%	25%	11%	50%	19%
-split duty	0%	33%	33%	22%	0%	21%
-teacher	40%	0%	42%	10%	75%	28%
-administrator	60%	100%	58%	84%	0%	67%
-clerical	0%	0%	0%	5%	25%	5%
-on term appt.	40%	100%	83%	37%	50%	56%
<u>PROF. STAFF</u>	<u>80%</u>	<u>33%</u>	<u>50%</u>	<u>65%</u>	<u>25%</u>	<u>65%</u>
-average #	4	0	5	11	7	7
-range	0-8	0-1	0-24	0-85	0-28	0-85
-on term appt	75%	0%	86%	77%	100%	77%
-full time	100%	100%	57%	69%	0%	70%
-part time	0%	0%	0%	31%	100%	19%
-voluntary	0%	0%	57%	0%	100%	19%
-consultants	25%	100%	43%	62%	0%	50%
-teachers	75%	100%	86%	85%	100%	85%
-administrators	0%	0%	14%	38%	0%	23%
-other	0%	0%	43%	38%	100%	35%
<u>OTHER STAFF</u>	<u>100%</u>	<u>67%</u>	<u>64%</u>	<u>70%</u>	<u>75%</u>	<u>72%</u>
-average #	8	5	3	3	4	4
-range	3-18	0-13	0-22	0-13	0-8	0-22
-clerical	100%	100%	78%	100%	100%	94%
-technical	80%	50%	33%	50%	33%	48%
-aides	60%	0%	11%	14%	33%	21%

Part D: Centre Facilities

This question sought to examine the location, hours of operation, hardware/software, and the facilities of the centres as shown in Table 6 below. It is evident from this table that a wide variety of facilities and equipment is available at centres across Canada. Almost all centres provide space for workshops (87%) and for make-and-take activities (83%), and many also provide a library (74%) and lounge (72%). A specific area for on-site consultation services is provided by two-thirds of the centres, and several offer a publishers' display area (63%). Less frequently available is a specific reading room (44%). A large percentage of centres (87%) provide instructional kits, and most also provide video-tape equipment, tapes, filmstrips and other varieties of hardware and software. Since the centres examined were professional development centres rather than resource centres, though, the type of equipment shown here does not necessarily reflect the full extent to which these items are generally available across the country.

Most centres are open throughout the school day, including before school and during the evening, with several (44%) offering Saturday hours. Centres in British Columbia and the Maritimes generally have the use of a complete school, whereas almost all of those in Manitoba and Ontario are located in part

of a school only. A chi square analysis of location showed a difference between provinces significant at greater than the 0.05 level (see Graph D1, Appendix D). Centres also operate in widely varying amounts of space, ranging from a single room for one Manitoba centre to twenty rooms for one in Ontario. Complete data concerning each of these areas on a province by province basis are given in Appendix D, Tables D1 to D4.

Table 6: A Comparison of Centre Facilities Across Canada

	BC	ALTA	MAN	ONT	ATL	CANADA
LOCATION						
-at central office	0%	33%	21%	12%	0%	14%
-complete school	60%	33%	7%	12%	100%	26%
-part of school	20%	33%	71%	76%	0%	57%
-aver. # of rooms	6	12	4	6	9	5
-range	4-10	3-20	1-12	2-20	8-10	1-20
FACILITIES						
-workshop area	87%				-movies	52%
-storage	76%				-videotapes	65%
-library	74%				-filmstrips	70%
-lounge	72%				-tapes	74%
-consult. area	67%				-records	63%
-reading room	44%				-instr.kits	87%
-pub. display	63%				-v.t.r. equipment	70%
-'make & take'	83%				-movie equip.	65%
-other	48%				-other	61%
EQUIPMENT						
HOURS						
-before school	67%					
-during school	89%					
-after school	96%					
-evenings	78%					
-Saturdays	44%					

Part E: Centre Programming and Effectiveness

This question was designed to find the priority given to various programs by the centres, and to determine the extent to which they felt themselves to be effective in performing those programs. The eight programs to be ranked were:

1. In-class consultation for classroom teachers
2. Curriculum development
3. Staff retraining
4. Materials distribution
5. On-site consultative services
6. Workshops and other in-service activities
7. Program implementation
8. Long-term professional development activities.

In the attempt to understand centres across Canada, this question was very important. It is unfortunate, therefore, that many centres answered incorrectly, or only partially. Only twenty-nine of forty-six centres completed the ranking section, and only thirty-five completely rated their efficiency in each of the program areas. This represents 32% and 21%, respectively, of all centres that did not answer these sections. Thus the results are not as conclusive as might have been hoped. In the tables following, percentages are based on total responses actually given, rather than as a percentage of all

centres in the region, in order to fully credit the partial results. (The exact number of centers in each area responding are shown in Tables E1 to E12, Appendix D.) Table 7 examines the priority ranking of the eight programs by the different regions, showing what percentage ranked an activity as their first, second or third most important activity. (See Appendix D: Tables E1 to E12 for a breakdown of the actual responses.) Workshops and other in-service activities placed first in all regions, even though only 85% ranked it as one of their top three activities. Staff retraining was eighth overall, with only 13% of the centres placing it first, second or third. The only program other than in-service activities that more than 50% of the centres overall ranked highly was that of materials distribution. Only in Alberta did long-term professional development place highly, with Ontario rating it very low. On-site consultation services were generally ranked high, but in-class consultation placed low in the rankings.

Another aspect of centre programming examined was the extent to which centres perceived themselves to be effective in each of the programs. Table 8 presents the percentage of centres in each region judging their programs to be 'Very Effective'. Centres feel the least effective in staff-retraining across the country, with only 8% being very effective in the area. The centres in the Maritimes only feel very effective in the areas of materials distribution, and

workshops, but as was noted earlier, they are generally quite short staffed. Centres in Manitoba have similar difficulties, and rate themselves even lower in all areas but curriculum development and long-term developmental activities, and in those areas only 9% of the centres feel themselves to be very effective.

Table 7: A Comparison of the Percentage of Centres Ranking a Program as First, Second or Third Priority

PROGRAM	B.C.	ALTA	MAN	ONT	ATL	CANADA
1	50%	0%	25%	49%	0%	34%
2	0%	33%	38%	18%	33%	24%
3	0%	0%	22%	9%	33%	13%
4	50%	33%	63%	50%	75%	56%
5	50%	33%	33%	42%	67%	42%
6	75%	100%	81%	83%	100%	85%
7	25%	33%	25%	33%	0%	27%
8	50%	67%	44%	17%	25%	34%

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops, etc. |
| (7) Program Implementation | (8) Long-Term Development Activities |

Table 8: A Comparison of the Percentage of Respondents
Ranking Different Programs as 'Very Effective' (4)

PROGRAM	B.C.	ALTA	MAN	ONT	ATL	CANADA
1	50%	0%	10%	38%	33%	29%
2	50%	0%	9%	20%	0%	17%
3	25%	0%	0%	12%	0%	8%
4	100%	33%	36%	62%	50%	55%
5	75%	100%	18%	44%	33%	42%
6	75%	100%	46%	59%	100%	64%
7	25%	0%	0%	19%	0%	11%
8	25%	67%	9%	27%	0%	22%

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops, etc. |
| (7) Program Implementation | (8) Long-Term Development Activities |

A Comparison of Program Ranking and the Perceived Degree of Effectiveness

Each of the programs was compared as to the ranking it was given, and the perceived degree of effectiveness. Table 9 shows a percentage comparison in each of these areas.

It is interesting to note that, as was pointed out in the

section on policy, those programs that are ranked as being high are ones that involve immediate, short-term planning - workshops, materials distribution and on-site consultation, while those that are ranked the lowest in both programming and effectiveness are ones that require a long-term commitment, and much more extensive planning curriculum development, in-class consultation and staff retraining.

A further comparison was made to analyze the extent to which a high rating of effectiveness correlated with a high ranking of priority. The number of centres in some of the individual regions was too small to allow for an effective chi square analysis, but across Canada some significant differences showed up. The significances of the chi square tests for each of the programs is given in Table 9. Those that are starred (*) show a significance at greater than the 0.05 level, others are not significant. In four of the eight areas of programming, results were significant enough to show that a relationship exists between the ranking of programs and the perceived degree of effectiveness, but in the other four there was not a relationship shown. Interestingly, those that showed a significant degree of relationship bear no relation to the ranking of either programs or of effectiveness. However, when responses to program ranking as a whole was compared with program effectiveness, to determine whether or not centres tended overall to rank those programs highly that they felt most

effective in, the chi square statistic showed there to be a very high level of significance. (See also Graphs E1 to E9, Appendix D.)

Table 9: A Comparison of Program Ranking and the Perceived Degree of Effectiveness

PROGRAM	PROGRAM RANKING	EFFECTIVENESS RANKING	CHI SQUARE SIG
In-class consultation	7	7	* 0.0377
Curriculum development	6	6	* 0.0480
Staff retraining	8	8	* 0.0283
Materials distribution	2	2	* 0.0058
On-site consult. services	3	3	0.4032
Workshops, etc.	1	1	0.1160
Program implementation	4	5	0.1269
Long-term pro.d.	5	4	0.2857
OVERALL COMPARISON			* 0.0000

Part F: Decision Making

In this question, centre directors were asked to note who was primarily responsible for making decisions regarding various aspects of centre policy and programming. The areas examined were:

1. Choice of materials to be purchased

2. Choice of workshops to be presented
3. Choice of curriculum development areas
4. Staff job descriptions
5. Total staffing of the centre
6. Facilities of the centre
7. Hours of operation.

The question was a fill-in type, and the responses were grouped into 5 categories:

1. Board officials
2. School Administrators
3. Centre director
4. Teachers
5. Others (including centre staff and consultants).

The complete breakdown of responses can be found in Appendix E, Tables F1 to F6. At this point, a look at some of the patterns of decision making (Table 10) shows that teachers generally have a high degree of say in the choice of materials and workshops, but, except for in centres in Manitoba, they have very little involvement in decisions made in other areas.

In order to determine whether or not there were any differences between provinces in the distribution of power, chi square statistics were used. In three of the areas where the board most frequently has the control over decisions (curriculum development, job descriptions, and facilities), the differences between provinces in regards to teacher involvement is

significant at greater than the 0.05 level (see Graphs F2 to F4, Appendix D). In the case of both curriculum development and facilities, Manitoba shows the greatest difference, whereas, in the case of job descriptions, Alberta proves to be the province that is different. Similarly, in the area where teachers had the greatest say (choice of workshops), the differences between the provinces in regards to the degree of board involvement was significant at greater than the 0.05 level, and this difference shows up in British Columbia (see Graph F1, Appendix 4). The board office has the greatest say in centre decisions in most provincial areas, and in Canada generally. The centre director has the greatest degree of control over decisions in Alberta and the Atlantic provinces.

Table 10: A Comparison of the Group
Most Frequently Listed as Making Decisions
In Different Areas

AREA	B.C.	ALTA	MAN	ONT	ATL	CANADA
-materials	t	d	t	d	d	d
-workshops	b	t	t	d	d	t
-curr. dev.	b	b	t	b	d/t/o	b
-job disc.	b	d	b	b	b/d	b
-staffing	b	b	b	b	b/d	b
-facilities	b	d	t	b	d/t	b
-hours	b/d	d	t	b	d	d

GROUP CODE

(b) Board Staff (a) Administrators (d) Centre Director
(t) Teachers (o) Others

Part G: Aspects of the Centre Role, Needs Assessment,
Developmental Activities and Materials Distribution

Part G on the questionnaire asked for information in several areas. A short-answer format was used, and the responses given in some of these areas were broken down into factors that could be compared across provinces. In the areas of Role Definition and Developmental Activities, the answers have been left intact and included in the appendices.

The Role of the Centre: Defined and Implicit

Directors were asked to note the defined role of the centre and any implicit role that might go beyond the defined role. A wide range of responses were given, and it was felt that it would be more descriptive of centres in the country to provide these answers in toto (see Appendix E), rather than trying to break them down into components and chart them. Most answers described activities similar to those outlined in Part E, with a strong emphasis on staff support services.

Needs Assessment

As noted earlier, this question asked for short answers. The methods of needs assessment noted by the various centres have been divided into six categories:

1. Formal assessment
2. Informal assessment
3. By administration
4. By an advisory board
5. Through personal contact
6. By personal request.

It is possible that many centres use methods that they did not note specifically, and consequently the data may not represent the true picture. It is interesting, however, to note the extent to which particular methods are specified. Table 11 following outlines to what extent each of these types of

assessment is most used in a centre. A chi square analysis showed a difference between provinces significant at greater than the 0.05 level, with Manitoba and Ontario showing a greater use of formal and informal assessment. (See Graph G1, Appendix D.) A further analysis was made, considering all types of assessment used in the various centres, and significant provincial differences did show up in the areas of administrative in-put and personal contact. (See Table G1, Graph G2 and Graph G3, Appendix D.) British Columbia shows more input by principals and consultants than do other regions, and Manitoba and the Atlantic Provinces show more use of personal contact to determine needs.

Table 11: A Comparison of the Types of Needs Assessment
Done in Centres Across Canada

METHOD	B.C.	ATLA	MAN	ONT	ATL	CANADA
-formal asses.	33%	33%	54%	47%	25%	45%
-informal asses.	0%	0%	0%	26%	0%	12%
-administration	0%	0%	0%	0%	0%	0%
-advisory board	67%	33%	8%	10%	0%	19%
-personal contact	0%	33%	31%	0%	75%	19%
-requests	0%	0%	8%	16%	0%	10%

- (1) Formal Assessment - includes surveys, questionnaires, review of services, analyses
- (2) Informal Assessment - includes hunches, verbal feedback
- (3) Administration - includes principals, consultants
- (4) Advisory Board - includes staff of centre, steering committee
- (5) Personal Contact - includes representative meetings, school visits
- (6) Requests - includes individual and group requests

Developmental Activities

The type of developmental activities done has been analyzed in three ways. First, it was noted whether centres that have developmental activities initiated them, responded to requests, or merely provided space. Second, the types of developmental activities undertaken were examined. These two parts of the analysis are shown in Table 12 following.

In addition, however, it was felt that it would be interesting to note what actual developmental and research programs were being done by the various centres. Thus, those that were reported are listed in Appendix F.

Half of the centres across the country initiate curriculum and/or materials development, and another 24% provide them when asked. Only 15% are not involved in this area at all, even though, as noted earlier, centres do not feel this area to be effectively handled. Curriculum development, done in 56% of the centres, is the most popular type of developmental activity undertaken, but a third of the centres are also engaged in some form of research. Staff development was only mentioned by a few centres, but since this question called for general answers, the possibility of other centres being involved in this area is not eliminated.

Table 12: A Comparison of the Types of Developmental
Activities Undertaken in Centres Across Canada

	B.C.	ALTA	MAN	ONT	ATL	CANADA
-initiate	60%	33%	50%	60%	0%	50%
-respond only	0%	67%	36%	15%	25%	24%
-provide space	20%	0%	7%	10%	25%	11%
-none	20%	0%	7%	15%	50%	15%
-curr. dev.	60%	33%	71%	55%	25%	56%
-materials dev.	20%	33%	28%	29%	25%	26%
-staff dev.	20%	0%	14%	10%	0%	13%
-skills analysis	40%	0%	14%	10%	0%	13%
-research	40%	0%	43%	30%	50%	35%

Materials Distribution

The various means by which centres distribute materials developed are noted in Table 13 below. The most popular method used is the school-district courier, but displays and workshops are used in many regions, as are several other methods that fit the needs of the individual centres. Significant differences between provinces at greater than the 0.05 level were shown in the use of displays and school visits, with the Atlantic Provinces showing a greater use of display, and Ontario showing a greater use of school visits. (See Graphs G3 to G6.)

Table 13: A Comparison of Methods of Materials Distribution
Used by Centres Across Canada

	B.C.	ALTA	MAN	ONT	ATL	CANADA
-courier	100%	67%	43%	80%	50%	67%
-visits	20%	0%	0%	45%	0%	22%
-workshops	40%	0%	14%	40%	0%	26%
-reps.	0%	0%	7%	0%	25%	4%
-newsletter	0%	0%	36%	10%	50%	20%
-display	40%	0%	14%	5%	75%	17%

V. A Comparison of Centres with the Theoretical Framework

The Theoretical Framework

As the questionnaire was developed, it was anticipated that certain responses would show a support for the theoretical model, as presented at the end of Chapter II. In order to determine to what extent centres across Canada did fit the model, a comparison was made between actual answers and those answers that would show support for the propositional statements. The nine propositional statements are:

DEFINITION

1. The teachers' centre is a physical facility operated principally by teachers for the purposes of teacher in-service education, enhanced teacher professional interaction, and curriculum development.

ASSUMPTIONS

2. Fundamental educational reform originates with the classroom teacher;
3. Outside experts can assist, but not instigate;
4. Teachers desire professionalism;

SERVICES

5. Centres should offer extensive in-service activities for the

professional development of teachers:

6. Centres should provide a materials source, both for manipulation and dissemination;
7. Centres should be the base of extensive developmental activity;

CONTROL AND FINANCE

8. The teachers' centre should be run by teachers and for teachers, and should be financed by the school system within which it is located;

FOCUS

9. The prime focus is the classroom teacher.

The Rationale

These statements, which grew out of the literature were matched with selected data collected during the survey. In the sections below, a rationale is given for each of the points of comparison chosen. Each question from the questionnaire that is to be examined is quoted, together with the anticipated response that would show support for some aspect of the model, and a note referring to which specific supposition the question is being compared. The numbers in brackets refer to the propositional statements as presented above.

Part A: Policy

In the section on policy, an answer of 'ALWAYS' (5) or 'USUALLY' (4) on all questions other than A3 provides support for several aspects of the model.

1. If the centre feels that "the director should be an experienced teacher", it shows that teachers are in the focus of the centre (9), and that they exert a measure of control over the centre (8). It also indicates that teachers will have a key role in any learning that goes on in the centre (1). It furthers the assumption that outside expertise is not always the best (3).
2. If staff are "teachers on term appointment", all points mentioned for A1 hold. Further, it promotes the assumption of reform originating with teachers (2), and shows that consultation is probably taking place (6).
3. N.C.
4. If the centre believes that "reform originates with the classroom teacher", it shows that teachers are the focus of centre activities (9), and provides support for all three assumptions in the model (2,3,4).
5. In conjunction with a positive answer to A7, a feeling that "university personnel can provide assistance" gives some support to the second assumption in the model (3).
6. If the centre feels that "needs assessment is necessary", it shows a desire to meet the needs of teachers (1,9). It also

implies the presence of in-service activities (5) and a desire for professionalism among teachers (4).

7. "Curriculum development activities" as a part of policy support factor 7 (in-service), and factor 4 (teacher professionalism).
8. "Research activities" supports the same factors as curriculum development (4,7).
9. Looking for the "cooperation of teachers" in the development of the centre gives a measure of support to factor 9 (teacher is the focus) and to the assumption that teachers desire professionalism (4).
10. The occurrence of "dialogue and debate on critical issues" would support factors 4 (professionalism) and 7 (centres as a base of developmental activity).

Part B: Access to and Use of Products and Services

In comparing the access to and use of centre services and products by different groups with various factors on the model, two groupings were looked at in particular: teachers (classroom, substitute and student) and the public (parents, students and community groups).

1. Teachers

- a. Access to products: This would support the definition (1) and control factors (8), as well as the provision of a materials source (6).

- b. Access to services: This also supports the definition given in the model (1) and the control factor (8), as well as in-service activity (5).
- c. Use of products: This would show support for the definition (1) and the desire for professionalism (4).
- d. Use of services: This would also show support of the definition (1) and the desire for professionalism (4).

2. The Public

The greater the access to, and use of, products and services by non-teachers, the less the centre can meet the needs of teachers. Consequently, negative answers only are considered in this comparison.

- a. Access to products: and
- b. Access to services: A negative response in these areas supports the definition (1) and control factors (8), as well as the focus (9).
- c. Use of products: and
- d. Use of services: A negative response in either area supports the definition (1) and focus (9).

Part C: Staffing Structure

Five aspects of staffing can be examined to provide some points of comparison with the model.

- 1. If the "director of the centre is a teacher", it supports the control factor (8).

2. If the centre has "full or part-time staffing", it shows support for the provision of services (5,6).
3. If there is "voluntary staffing", support is shown for a desire for professionalism (4), but since this was not specifically asked for on the questionnaire, no mention of voluntary staffing is not considered to be a negative factor in this regard.
4. The presence of "consultants" on staff supports the service factor (5), if there is full or part-time staffing.
5. Given full or part-time staffing, the presence of "teachers" on staff shows support for the basic definition (1).

Part D: Centre Facilities

Five aspects of this part can be used for comparison with the theoretical framework.

1. If the centre provides a "workshop area", then it shows support for the definition (1) and for in-service activity (5).
2. If a "professional library" is provided, the factors of professionalism (4) and developmental activity (7) are shown.
3. An "area for consultation" supports that area of service on the model (5).
4. A "make-and-take area" supports the provision of a materials source (6).

5. The provision of "instructional kits" also supports the centre as a materials source (6).

Part E: Centre Programming Effectiveness

The comparison between effectiveness in programming and the theoretical framework is based on the assumption that the centres that are effective or very effective in certain areas of programming show that certain aspects of the model are, in fact, pertinent to that centre.

1. The effective provision of "in-class consultation" shows support for the definition (1), the assumption of professionalism (4), services (5), and the focus (9).
2. "Curriculum development" shows a support for the concepts of educational reform beginning with teachers (2), teacher professionalism (4), and for services (6).
3. "Staff retraining" also shows support for the definition (1), professionalism (4) and services (5), as well as for the focus (9).
4. Effectiveness in "materials distribution" supports the centre as providing a materials source (6).
5. Effective "on site consultation" supports the same factors as does number 1 (1,4,5,9).
6. Effectiveness in providing "workshops" also supports these factors (1,4,5,9).
7. N.C.

8. Effectiveness in "long-term professional developmental activities" shows support for the assumption of educational reform originating with teachers (2), and of professionalism (4), and for the provision of in-service (5).

Part F: Decision Making

1. If board officials or administrators are not involved in decision making regarding "materials, workshops, and areas of curriculum development", then there is support for the definition (1), origin of reform (2), control (8), and focus (9).
2. A negative response to board or administrative involvement in decision making in the area of "job descriptions and staff positions" supports the control factor in the model (8).
3. A negative response to board or administrative involvement in deciding "facilities" provides support for the control factor (8).
4. If teachers, or a centre director who is a teacher, make decisions regarding "materials, workshops and areas of curriculum development", the the centre matches the model in the areas of definition (1), origin of reform (2), control (8), and focus (9).
5. If teachers or a teacher-director are involved in decisions

regarding "job descriptions or staff positions", then there is a match in the area of control (8).

6. If teachers of a teacher-director make decisions regarding "centre facilities", then there is a match in the area of control (8).

Part G: Developmental Activities

1. If there are developmental activities "initiated or provided in response to requests", then the centre matches the model in the areas of definition (1), origin of reform (2), assumption of professionalism (4), and developmental activity (7).
2. "Curriculum development or research" supports the same factors (1,2,4,7).
3. "Materials development" supports the model in the areas of definition (1) and provision of a materials source (6).

The Comparison of Selected Data with the Model

Table 14 provides a summary of the points at which comparisons were made between the data and the theoretical model. For example, an 'x' under 'DEF 1' beside 'POLICY 1' notes that answers to the first policy statement can be compared with the statement of DEFINITION as give in statement 1 on page 75.

In order to effect this comparison, the original data was reprogrammed to select those centres that responded to each specific question in the manner noted above. From this a listing was obtained of all centres that matched each question as specified. Next, these results were grouped to obtain a print-out for each centre in order to show the extent to which it matched each of the nine points on the model. The totals for each proposition for each centre were tabulated, and were entered into the computer as a new data file. Frequency distributions and crosstabulations were then done on this data in order to examine the extent of national and provincial agreement with the model.

These results have been shown on Table 14 in two ways. First, the total percentage of centres that did answer each question in the manner specified is given for each of the questions examined. Second, the national average for each of the nine propositions under examination is given, and the range of responses across the country is shown.

Table 14: A Summary of Comparison Points
Between Responses to Questions
and the Theoretical Model
Giving National Totals

	DEF	ASPECTS OF THE MODEL									NATIONAL TOTAL
		ASSUMPTIONS			SERVICES		CONT. FOCUS				
	1	2	3	4	5	6	7	8	9		
POLICY											
1	X		X					X	X	93%	
2	X	X	X			X		X	X	93%	
3											
4		X	X	X					X	60%	
5			X							65%	
6	X			X	X				X	50%	
7				X			X			41%	
8				X			X			26%	
9				X					X	45%	
10				X			X			23%	
USAGE											
1	X					X		X		92%	
2	X				X			X		91%	
3	X			X						78%	
4	X			X						77%	
5	X							X	X	43%	
6	X							X	X	35%	
7	X								X	55%	
8	X								X	35%	
STAFFING											
1								X		28%	
2					X	X				65%	
3			(X)							19%	
4					X					50%	
5	X									35%	
FACILITIES											
1	X				X					87%	
2				X			X			74%	
3					X					67%	
4						X				83%	
5						X				87%	

(cont.)

	ASPECTS OF THE MODEL (CONT.)									NATIONAL TOTAL
	DEF	ASSUMPTIONS			SERVICES		CONT.		FOCUS	
	1	2	3	4	5	6	7	8	9	
PROGRAM EFFECTIVENESS										
1	x			x	x				x	58%
2		x		x		x				61%
3	x			x		x			x	30%
4						x				76%
5	x			x	x				x	78%
6	x			x	x				x	97%
7										
8		x			x					65%
DECISION MAKING										
1	x	x						x	x	59%
2								x		26%
3								x		22%
4	x	x						x	x	54%
5								x		37%
6								x		30%
RESEARCH AND DEVELOPMENTAL ACTIVITIES										
1	x	x		x				x		74%
2	x	x		x				x		65%
3	x					x				26%
(TOT)										
TOTAL	22	8	4	17	10	9	6	13	14	106
NATIONAL AVERAGE										
	14	4	2	10	6	5	3	6	9	60
RANGE (7-18)		(1-4)		(1-9)		(1-6)		(1-13)		
		(1-7)		(3-15)		(2-8)		(3-12)		(25-88)

Even though there was considerable variation between individual centres, as shown by a range of 25-88/106 in the total number of possible points of comparison, the crosstabulation and chi square statistics show a significant

difference between provinces only in the area of control. The greatest differences in scores on the control factor showed up between Ontario at the low end, with an average of 5 on the 13 points of comparison, showing a low level of teacher control; and Manitoba and the Atlantic provinces at the high end, with averages of 8 and 9 respectively. The crosstabulation provided a chi square of 56.975 with 36 degrees of freedom, and a significance of 0.0145 (see Graph F5, Appendix D).

This difference in level of teacher control has been pointed out in other areas of the paper: in the literature review and in the section of this chapter analyzing Decision Making.

Also of interest is the relatively low degree of agreement, only 56% nationally, between what centres report to be the status of centring in Canada and the theoretical model of an effective centre as derived from the literature. Especially low, at 33% agreement, is the proposition that centres should be the base of extensive developmental activity. As will be shown in the next chapter, a step change is necessary if teachers' centres are to become truly effective in in-service training of teachers and the development of innovative programs in education.

VI. Summary and Conclusions

General Findings

There exists in Canada a general pattern of a teachers' centre that is like neither the general American model or the general British model. This is probably due to the control of education by provincial ministries, unlike the essential autonomy of the British LEAs, and to the lack of extensive grants of Federal money for various educational projects, as in the USA, as noted in Chapter II. There are considerably fewer centres in Canada than in either of the two other countries, and those that exist tend to be associated with a local school district and under considerable control by the administration of that district. In fact, the degree of control is the factor that shows the most significant difference from province to province. Of over 100 variables analyzed, the only ones that show a significant difference between provinces are:

1. Board use of services, given access;
2. Voluntary staffing;
3. Board involvement in deciding on the choice of workshops;
4. Teacher involvement in deciding areas of curriculum development;

5. Teacher involvement in defining job descriptions;
6. Teacher involvement in determining facilities;
7. Types of needs assessment undertaken;
8. Administrative into needs assessment;
9. Personal contact as a means of needs assessment;
10. School visits as a means of distributing materials;
11. Displays as a means of distributing materials.

Of the eleven areas mentioned above, four (3, 4, 5, and 6) are concerned with administrative versus teacher presence in the centre. In fact, when the responses were compared with the theoretical model, control was the only one of the nine propositional statements that showed a significant difference greater than 0.05 between provinces.

In addition, Canadian centres concentrate mostly on in-service activities and consultative services, and tend to avoid curriculum development and long-range professional development programs. As noted earlier, this shows a preoccupation with items of greater immediacy but lesser consequence, despite extensive literature showing the need for long-term projects in in-service, as presented in the section, 'The Services of the Centre', in Chapter II.

Summary of the Findings

Policy

Over eighty percent of the centres across Canada indicated a high degree of concurrence with the concepts of having a centre director with previous classroom experience, providing needs assessment, and developing the centre as a cooperative effort between teachers, school boards and the community.

Fifty percent or more also indicated that it is their policy to have a consultative staff of classroom teachers on term appointment, to take a lead in developmental activities, and to provide a place for continued debate and dialogue in education.

Just less than fifty percent feel that university personnel can be of assistance in curriculum development. Very few centres feel that serious reform is needed, or that centres should undertake research studies, but forty percent note a policy that reform originates with the classroom teacher. This again highlights a fact brought out on the previous page, that centres tend to concentrate on those areas that are most easily implemented. Even though the question asked for a comparison of centre policy with each statement presented, it is possible, and

quite probable, that in many cases policy is determined by the actual situation, rather than being the precursor of a centre that tries to operate according to certain set policies. This would help to account for the seeming lack of cohesion between policy and programming, as shown later.

Centre Facilities and Usage

The majority of centres operate within part of a school, and are open for extended hours from before school until the evening. Most offer considerable facilities, including workshop areas, make-and-take facilities, a library, a lounge, consultation areas, and publishers' displays. Facilities are open generally not only to classroom teachers, but also to student and substitute teachers, as well as to board members and board staff. To a lesser extent, parents, students and the community are given access.

Use of services, when given access, is high among classroom and student teachers and board staff, moderate by students and the community, and fairly low by board members and parents.

Staffing

Generally centre directors are considered to be administrative staff, and two-thirds of the centres have full-time professional staff. Almost all centres have clerical/technical staff, with many offering a wide variety of services.

The fact that most centre directors are administrators points up the fact that Canadian centres are under the control of the school-district. While many services are offered to teachers, the guiding policy is not generally overseen by teachers.

Centre Programming and Effectiveness

Workshops and other in-service activities ranked first across Canada, and materials distribution was also ranked highly by over fifty percent of the centres. On-site consultation was a top choice of more than a third of the centres in all regions, and of more than half in B.C. and the Maritimes. Staff retraining, however, as well as curriculum development and program implementation were the top choice of less than a third of the centres across the country.

It is possible that the area of workshops and other in-service activities is not a genuine category, distinct from staff retraining, program implementation and curriculum development. However, respondents did see these categories as different entities. This may mean that workshops are seen as short-term interventions, designed to meet an immediate need, and as one means of implementing more far-reaching programs, and thus while being a part of staff retraining programs, for example, are a separate focus for centre personnel by themselves.

Across Canada, centres feel most effective in in-service activities (such as workshops), materials distribution and on-site consultation; and least effective in providing staff retraining. It is possible that workshops and materials distribution are rated as being highly effective because there is no real data as to the effectiveness of such activities on teaching, and it is felt that anything done for the teacher that can be taken directly back to the classroom will have direct results on teaching and learning.

Decision Making

Teachers generally are involved in decision making in the areas of material and workshop selection, but not in the areas of staffing and determination of facilities, which are usually decided by board office staff, again demonstrating that teachers' centres in Canada are run by local education authorities.

Needs Assessment

Just under fifty percent of the centres undertake formal needs assessment, even though ninety-three percent noted under policy that needs assessment is necessary. As mentioned earlier, the centres' stated policy is not necessarily coincident with the actual functioning of the centre. Other forms of assessment are used, but in a limited way only. In British Columbia and Manitoba administrators have a relatively

high level of input, and personal contact plays an important role in many areas.

Developmental Activities

Developmental activities, particularly curriculum development, is initiated by fifty percent of the centres, and another twenty-four percent provide such activities when requested. Thirty-five percent are involved in research in a variety of areas, but only one-eighth of all centres provide staff development activities. These figures are interesting in light of the low ranking of programs in curriculum development and research by most of the centres. It is apparent that even though many centres undertake these activities, they do not feel highly proficient in doing them, nor do they attach a high degree of importance to them in comparison to other activities.

Materials Distribution

Centres generally distribute materials through the school district courier system, with a quarter of the centres - mostly in Ontario and B.C. - using visits and workshops to disseminate information.

Expanding the Model

The nine statements that were presented at the end of Chapter II, as a proposed theoretical model of a teachers' centre, were developed from a review of the literature in order to provide some functional guidelines for the development of centres that can be viable places for the in-service development of teachers and the development of innovative educational practices. The original propositions, developed over a year ago, were constrained by the literature. A rethinking of the model, based in part on the literature review and readings done since, in part on the information provided by the survey, and in part on conversations with centre personnel and researchers in the field from Canada, U.S.A. and Great Britain, has led to a considerable expansion of the concepts contained within each proposition.

Now, in addressing the question of the teachers' centre as a whole, the following is presented as an overview of what the author feels a good teachers' centre should be in order to provide effective in-service, and to make a genuine contribution to change in the educational system.

1. Centre programming should be aimed at having all teachers realize the need for understanding research and for conducting an on-going analysis of what is happening in education; not necessarily to force them to change, but to

allow them to get a sense of what is available in terms of instructional techniques and of the theoretical base of such techniques, so that they can make intelligent choices in program planning. Then the centre should have resources available to help teachers to implement fully any program they may wish to try, including helping them to learn it step by step, if necessary.

2. The prime focus is the classroom teacher. The centre must consider the teacher to be its primary client. Since the teacher is the one who must face the pressures of day-to-day instruction of often unwilling children, and who must implement any curriculum changes, then it is the teacher who must change and grow if education is to develop positively. Consequently, parents, community groups, board members, etc. should not be considered to be prime clients of a centre, since meeting the needs of outside groups may conflict with the job of providing viable in-service and long range development programs for teachers. Similarly, students should not be considered to be clients of a centre. Students are the clients of the schools and will benefit from any teacher growth, and it is important that program organizers plan in terms of adults, not children, if teachers are to be assisted and provided for effectively. Finally, administrators are clients of the centre to the extent that they are teachers. A strong emphasis on the

part of the centre towards management would subjugate the needs of the teachers to the needs of the system and organization, unless staffing is provided for the purpose. Moreover, if the centre becomes a tool of the board, it may not be able to meet the needs of the teachers as effectively.

3. Teachers centres should be run by teachers. In order to meet the requirements mentioned above, teachers must have the majority voice in the running of a centre, since no other group can be both fully cognizant of the needs of the classroom and fully sympathetic to the needs of the teacher. Other groups could function in an advisory capacity, but should not have a deciding voice. This was shown, in Chapter II, to be the feeling of several writers in the field of in-service.

4. Teachers' centres should be financed by the school system. Teachers are employees of a given system, and improved classroom performance can only have positive results for the total educational program of a district. With declining enrollment and the consequent decreasing staff population, systems must provide for the upgrading and professional growth of teachers as part of their responsibility to taxpayers to provide the best possible educational system. The purpose of in-service is the improvement of instruction, and is therefore an expense of the educational system, not

of the teacher.

5. Three assumptions should form the foundation of the centre's philosophy and policy:

- a. Serious reform originate with the teacher. The involvement of teachers in planning leads to a stronger commitment to implementation, and if teachers must attend programs through compulsion, implementation efforts will probably be weak, or non-existent. Moreover, teachers are more likely to be able to demonstrate the practicalities of their programs to other teachers than educational theorists, since teachers have more credibility with other teachers.
- b. Outside experts can assist but not instigate. Given five hours a day of total control over their environment teachers may resent situations where they are considered to be unequal to the task and in need of direction. Teachers will attend workshops and seminars when they feel that a specific need will be met, and they will ask for advice when they feel in need of it.
- c. Professionalism is desired by teachers. If a centre does not operate on the philosophy that teachers desire a high degree of professionalism, then it cannot possibly provide professional development of any degree of usefulness, thus centres that do not see teachers as desiring growth are operating under false pretenses.

Teachers are professionals who wish to do the best job possible, not stubborn reactionaries who must be forced to change, and a centre that recognizes and meets these requirements will be beneficial to education and teachers alike.

6. Centres should provide a wide range of services:

- a. They should provide consultative services and workshops, both on- and off-site. Workshops, however, need not be the sole responsibility of centre staff, as many classroom teachers are highly knowledgeable in a certain field, and given time to prepare and present their offerings are generally willing to do so.
- b. They should provide a material source, both for manipulation and for dissemination. Centres should have activity rooms where teachers can make things, either to supplement a lesson or to decorate a classroom. Often new ideas gained in a workshop session can be solidified by the immediate application of the skill. In addition, teachers are more and more frequently being asked to provide instruction in manually oriented areas such as clay and woodworking, and some provision must be made for hands-on learning.
- c. They should be the core of extensive developmental activity. There is a need to move beyond the technology of teaching to the theoretical aspects of education as a

whole, and centres that exist solely to provide 'band-aid' solutions to daily problems cannot justify a physical facility and permanent staff. Only by providing services in areas of educational development can centres have stability and validity as a public expense. True professional development looks beyond the provision of a few tricks to make spelling lessons successful, to the entire spelling program as a part of language development as a whole, and to one particular year's curriculum in spelling as part of a logical, reasoned progression. In groups, or individually, teachers should be able to find room and support for research and curriculum planning. Thus, library facilities and staff knowledgeable in many curriculum areas should be provided to support teachers in such activities. As a 'centre' of teacher activity, the teachers' centre is in an ideal position to conduct research into many aspects of teaching and learning, an area in which the survey has shown many centres to be sadly lacking. The provision of this range of services provides for three broad areas of in-service development for teachers - assistance, instruction and innovation, all of them a vital part of professional growth.

7. In general, teachers' centres must be places that are run primarily by teachers for the purposes of self-development

in subject areas and growth as a professional. The centre must be a physical location where these activities can take place, since a physical location provides a point of continuity; it is there when the teacher is ready for it. A centre should be a neutral place where teachers can and will go freely to learn and to share. Facilities at the district board office may deter some teachers, and facilities in an operational school may be under too much direction by the building administrator. It should be a place where teachers can meet with other teachers in a pleasant atmosphere after the pressures of the classroom, a place where a teacher can be free to make mistakes while learning, a place where teachers can receive support and assistance from other teachers.

Providing these things will not solve all of the problems of in-service. Also of paramount importance is attention to the type of programming that will be done in order to ensure that the centre does not become a teacher-run source of poor in-service, instead of an administratively-run one.

Recommendations

The following recommendations are presented in light of all that has gone before. They are not intended to be all inclusive, but hopefully will help to provide some direction, in conjunction with the previous section, that will help centres in

Canada to move from where they are to where they should be, as centres that are efficient and effective in meeting the needs of teachers and education in Canada.

Programming

1. Centres need to adopt a policy of a cyclical approach to their programming: needs assessment, provision of services, evaluation.
2. Centres need to focus on the perceived needs of teachers, in order to avoid becoming an administrative tool; and on the long term needs of education in order to avoid superficiality.
3. Centres need to focus on long-term as well as immediate needs.
4. Centres need to consider the process as well as the content of in-service.
5. Centres need to undertake research to determine the effectiveness of in-service programming on pupil outcomes.
6. Centres need to undertake a course of action to ensure that the board and community understand the value of the services offered, in order to avoid losing funding with declining enrollment.

Facilities

1. Centres must provide extensive hours of operation, including weekend and evening hours, in order to allow teachers maximum usage of the facilities.
2. Centres must combine professional development services and material resources in order to provide a complete range of services, rather than allowing these functions to be the responsibility of two separate entities, as is often the case.
3. In order to go beyond short-term thinking, sharing with others is essential, and consequently centres should undertake to develop a network and information pool both within and between centres.

Needs Assessment

1. All constituents of the educational community need to be considered in conducting needs assessments: teachers, administrators, trustees, parents and students, to the degree that they are recipients of the programming performed by the centre or are the ultimate beneficiaries of it. This does not imply that these groups are to become responsible for programming or decision-making in the centre, only that since they are part of the educational community, the centre

needs to be aware of their needs in determining how the centre can best serve the community.

APPENDICES

Appendix A: The Questionnaire

Development of the Questionnaire

Following the development of the theoretical framework presented in Chapter 2, several steps were taken to produce a survey questionnaire. First, nine professional development and resource centres in the Lower Mainland area of British Columbia were visited, and the services and products of these centres were examined in considerable detail. Second, a service matrix was designed (see Table 15 below), the purpose of which was to find as many areas as possible to examine and analyze within a centre. Third, a question was devised for each item listed inside the matrix.

Table 15: Centre Product and Service Matrix

	PRODUCT ORIENTATION	SERVICE ORIENTATION
WHO?	staff consumers suppliers	staff-teaching -support consumers
WHAT?	software hardware production	on-site off-site needs assessment dev. activities research
WHERE?	physical layout storage	facilities
WHEN?	ordering acquisition	hours of operation availability of staff
WHY?	rationale decision making	rationale decision making needs assessment
HOW?	dissemination acquisition	recruiting and servicing consumers

These questions were then rewritten as sample questionnaire statements in order to determine the type of information that might be gleaned from the study.

For example, the cell on the service matrix labelled ORIENTATION/WHY led to the two areas of 'rationale' and 'decision making' as possible items for examination. The first stage questions for these items were: (1) What is the rationale behind the selection of products to be used in the centre? and

(2) Who decides what products will be used in the centre? These questions were then rewritten as follows in order to examine them as actual items on a survey:

1. Please describe the rationale behind the selection of items to be used in the centre.
2. Please note who makes the decisions as to what products will be placed in the centre. Please note YES or NO.
 - a. elected board members __
 - b. board officials__
 - c. centre director__
 - d. teachers__
 - e. others__

When such a survey item had been developed for each part of the matrix, extensive regrouping and refining was done in order to eliminate those items that were redundant, those that were too lengthy, and those that would give information either too obvious or too difficult to analyze effectively. The questions were further modified to downplay the product orientation aspect of centres, since many centres have limited materials but still provide extensive in-service, while others are merely resource centres, and the present study is not concerned with these latter places.

The next step was to develop questions that examined the role and policy of the centre. These were primarily scaled-response and open-ended questions. (See Questions A and

G respectively on the questionnaire below.) These questions were designed to test the assumptions made on the model. Each assumption is couched in more than one of the survey items, however, in order to insure a more accurate analysis of the results. (See Chapter V, Comparison of Centres With the Theoretical Model.)

The Layout

In laying out the questionnaire, an attempt was made to balance the types of questions, the degree of difficulty involved in determining an answer, and the area of examination (policy vs service).

Thus, Question A asks the most probing questions, through the use of positive statements and scaled response answers. This is intended to be the most difficult question, and it relates almost entirely to policy. This question is placed at the beginning because the statements may be interpreted as showing an apparent bias, and this can be overcome by later questions that are more neutral.

Question B is quite straight forward, using YES/NO responses to determine who uses the centre. This should serve to counteract any hesitancy caused by the apparent bias shown in Question A, and, consequently, was on the same page.

Question C appears straight forward, but it asks for a lot

of information concerning the staffing of the centre, and may be quite time-consuming to answer. It is designed to indicate some of the policy of the centre, as well as the structure.

Question D, as a checklist, should be the easiest question to answer, and for this reason was placed on the same page as Question C. It is designed to gather data concerning facilities and products.

Question E is a two-part question that examines the services offered by the centre. The first part is a forced-choice ranking question, and the second part is a scaled response question. The ranking should help to show the underlying philosophy of the centre, and the question concerning the degree of perceived effectiveness was designed to provide information helpful to the resolution of the problem under study.

Question F, in asking who is responsible for the decision making, examines both policy and philosophy, and, consequently, provides information concerning the model and its application in centres.

Question G, as the last question, is designed to allow the respondent to have the last word. It examines centre policy, but as a short-answer, open-ended type of response is asked for, following several forced-choice and checklist type questions, it should be viewed as an unbiased question, (contrary to Question A) and answered openly. The space is limited in order not to

make the respondent feel compelled to write a long and detailed answer.

The Questionnaire

A. Please note the extent to which each of the following represents the policy or underlying assumptions of your Teachers' Centre.

5=ALWAYS 4=USUALLY 3=SOMETIMES 2=RARELY 1=NEVER

				
	5	4	3	2	1
1. The director of a Teachers' Centre should have prior classroom experience
2. The consultative staff of a Teachers' Centre should be classroom teachers on term appointment.....
3. Serious reform is needed in education.
4. Reform must originate with classroom teachers.....
5. University personnel can be of assistance in curriculum development..
6. Needs assessment is necessary in order that programs can meet the real concerns of teachers.....
7. Teachers' Centres should take the lead in developmental activities.....
8. Teachers' Centres should undertake research studies.....
9. Teachers' Centres should be a result of cooperation between teachers, school boards, and the community.....
10. Teachers' Centres should be places where dialogue and debate on critical issues in education take place.....

B. Do the following categories of people have access to, and tend to use, Centre services and products? Please check (/).

	ACCESS TO PRODUCTS		TEND TO USE PRODUCTS		ACCESS TO SERVICES		TEND TO USE SERVICES	
	Yes	No	Yes	No	Yes	No	Yes	No
1. Elected board members.
2. Board office staff....
3. Classroom teachers....
4. Substitute teachers...
5. Student teachers.....
6. Parents.....
7. Students.....
8. Community members.....

C. Please indicate the staffing structure of the Centre as follows:

- ROLE:** Give the official designation (eg. coordinator, consultant, typist, etc.) and note whether the position is considered to be administrative (A), teaching staff (T), or clerical/technical (T).
- NUMBER:** Give the total number of people who occupy that role.
- TERM:** Give the length of the appointment.
- AVAILIBILITY:** Note the general on-site and off-site hours.

ROLE	NUMBER	TERM	AVAILIBILITY	
			ON-SITE	OFF-SITE
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

D. Please check (/) the type of facilities that the Centre has.

LOCATION

Complete use of a school building
Partial use of a school building
Rented facilities
Other (please specify)
.....
Number of rooms total

HOURS OF OPERATION

Open before school hours
Open during school hours
Open after school hours
Open in the evening
Open Saturdays

ROOMS

HARDWARE/SOFTWARE

Workshop space	.....	Movies	.....
Storage space	.....	Video tapes	.....
Library facilities	.....	Filmstrips	.....
Lounge area	.....	Tapes	.....
Consultation area	.....	Records	.....
Reading room	.....	Instructional kits	.....
Publishers' display area	.....	Video tape equipment	.....
'Make and Take' area	.....	Movie equipment	.....
Other (please specify)		Other (please specify)	
.....		
.....		
.....		

E. Please rank the following in ascending order to show which activities form the main focus of Centre programming. Rank the most important activity as 1, the least important as 8. Please also note beside each item whether you feel your centre to be Very Effective (VE), Effective (E), Marginally Effective (ME) or Ineffective (I).

In-class consultation for classroom teachers	.....	VE	E	ME	I
Curriculum development	.....	VE	E	ME	I
Staff retraining	.....	VE	E	ME	I
Materials distribution	.....	VE	E	ME	I
On-site consultative services	.....	VE	E	ME	I
Workshops and other in-service activities	.....	VE	E	ME	I
Program implementation	.....	VE	E	ME	I
Long-term professional development activities	.....	VE	E	ME	I

F. Please note who makes the decisions regarding each of the following areas. (eg. director, teachers, superintendent's office, etc.)

Choice of materials to be purchased.....

Choice of workshops to be offered.....

Choice of curriculum development areas.....

Staff job descriptions.....

Staff positions: type and number.....

Centre facilities.....

Hours of operation.....

G. Please answer or comment on each of the following as fully as possible.

1. Under your mandate, what is the defined role of the Teachers' Centre?
2. Is there an implicit role that goes beyond the defined role?
3. What is the process of needs assessment used by the centre?
4. What developmental activities are undertaken by the centre? (eg. curriculum development, etc.)
5. Please describe any research in which the centre is involved.
6. By what means does the centre distribute materials that are developed?

Appendix B: The Covering Letters

September 7, 1979

.....
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.....
.....

Dear

A study is being undertaken at Simon Fraser University (Faculty of Education) in order to analyze the organization, policy and philosophy of Canadian teachers' centres, to provide an overview of centre development in Canada. The study is being done in the recognition that while teachers' centres provide a valuable base for professional growth and innovation in education, little is known about their development in Canada. Thus, the study is expected to make a useful contribution in helping those working to establish and maintain teachers' centres, and in contributing to the research literature.

The accompanying three-page survey is designed to examine several aspects of teachers' centres. We ask that you fill in each section and return the questionnaire in the enclosed stamped, self-addressed envelope as soon as possible, but no later than September 30th, 1979.

Also enclosed is a blank label that you may fill in and return should you wish a copy of the survey results.

We would like to thank you in advance for your cooperation.

Yours Sincerely,

Marvin F. Wideen

December 13, 1979

.....
.....
.....
.....

Dear.....:

Early in September a questionnaire was mailed to you and to other Directors of teachers' centres across Canada. The purpose of this survey was to develop an overview of teachers' centre development and function across the nation.

Response has been generally high and a very interesting pattern is emerging. We hoped to have an even higher response, however, and therefore we are again asking you to take the time to complete the form. For your convenience, in case you have lost or did not receive the first package we sent, we are enclosing an additional survey form, stamped, self-addressed envelope, and blank label that you may fill in should you wish a copy of the survey results.

We ask that you fill in each section and return the questionnaire before January 1st, 1980.

Thank you for your cooperation in this matter.

Yours sincerely,

Marvin F. Wideen

Appendix C: Teachers' Centres in Canada

(The following Centres completed questionnaires, and are represented in the results presented.)

BRITISH COLUMBIA

1	Teacher Centre 123 E. 6th Ave. Vancouver, B.C. V5T 1J6	Stu Corsan	872-2631
2	Professional Development Centre 350 S. Holdom Ave. Burnaby, B.C.	Blake Ford	299-8464
3	District Services & Teacher Centre 1000 Austin Ave. Port Coquitlam, B.C. V3K 3P1	Ian MacSween	936-0491
4	Resource Centre 22435 Selkirk Ave. Maple Ridge B.C. V2X 3X1	Lloyd Wishart	467-1111
5	Curriculum Service Centre 135 W. 12th St. North Vancouver, B.C. V7M 1R2	Blair Greenwood	987-8141

ALBERTA

- | | | | |
|---|--|---------------|----------|
| 1 | The Teacherage
13910-122nd Ave.
Edmonton, Alta.
T5L 2W3 | Lillian Wight | 452-0790 |
| 2 | St. Anthony Teacher
Centre
10425-84 Ave.
Edmonton, Alta.
T6E 2H3 | Tom Glancey | 439-7356 |
| 3 | Strathcona Teacher
Centre
2001 Sherwood Drive
Sherwood Park, Alta.
T8A 3W7 | R.J. Schmidt | 464-8235 |

MANITOBA

1	Teachers' Library & Resource Centre 436 William Ave. Winnipeg, Man.	Gerald R. Brown	943-3541
2	David Livingstone ERC 270 Flora Ave. Winnipeg, Man. R2W 2P9		586-9631
3	Seven Oaks Teachers' Centre 395 Jefferson Ave. Winnipeg, Man. R2V 0N3	William Zuk	586-1057
4	St. James-Assiniboine Teacher Centre 150 Moray St. Winnipeg, Man. R3K 0M2	Peter L. Mingo	885-5662
5	St. Boniface Teachers' Centre 50 Monterey Road Winnipeg, Man. R2J 1X1	Dr. Linda Asper	257-3576
6	Transcona-Springfield Teacher Centre 605 Wayoata St. Winnipeg, Man. R2C 1J8	Wally Kimpton	
7	Park Ave. Teacher Centre Lac du Bonnet, Man.	E. Lewko	345-8816
8	Teacher Centre Shevchenko School Vita, Man. R0A 2K0	Ann Friesen	425-3535
9	Assiniboine South Teacher Centre 2240 Grant Ave. Winnipeg, Man.	Carol Wright	475-5839

10	St. Vital Teachers' Centre 770 St. Mary's Road Winnipeg, Man. R2M 3N7		233-3986
11	Human Resource Centre 211 Main St. Selkirk, Man. R1A 1R7	Keith D. Walker	482-8224 482-8294
12	Rhineland Teachers' Centre Box 390 Altona, Man. R0G 0B0	Beverley Smith	324-6622
13	Teachers' Activity Centre 103-6th Street Brandon, Man. R7A 4K5	Mary Hume	728-0184
14	Hanover Teachers' Centre Steinbach, Man. R0A 2A0	Debbie Mainman	326-3325

ONTARIO

1	Dufferin-Peel Roman Catholic Separate School Board 100 Dundas St. W. Mississauga, Ont. L5B 1H6	J. Hugel	270-4630
2	Etobicoke Bd. of Ed. 1 Civic Court Centre Etobicoke, Ont. M9C 2B3	P.W. Buddenhagen	626-4360
3	St. Mary's Teacher Centre 280 Brock St. Kingston, Ont. K72 1S4	Mary Anne Miller	542-1587
4	Halton RCSS Board Teacher Resource Centre 530 S. Cumberland St. Burlington, Ont. L7N 2X2	Joan Ann Smith	632-6280
5	Hamilton Bd. of Ed. 100 Main St. W. Hamilton, Ont. L8N 3L1	A. Krever	527-5092
6	Learning Material Centre 398 King St. W. Hamilton, Ont.	Carol Pitt	525-2930
7	Bancroft Education Office Box 160 Bancroft, Ont. K0L 1A0		332-2165
8	Hastings-Prince Edward County RCSS Board 158 George St. Bellville, Ont.	A. Vinall	962-9571

9	Queen Elizabeth Public School 61 Poplar Ave. Kirkland Lake, Ont. P2N 2M7	M. Barnes	567-7070
10	Lambton County Bd. of Ed. 200 Wellington St. Sarnia, Ont. N7T 7L2	Gordon Swan	
11	Primary Teachers' Centre 401 Queens Ave. London, Ont.	Sister Valerie	434-0282
12	Region 2 Metro RCSS 126 Rathburn Ave. Etobicoke, Ont.	L.S. Power	231-3385
13	Toronto Region Office 38 Hazleton Ave. Toronto, Ont. M6H 3N4	Dr. A.J. Barone	421-8950 (317)
14	Professional Development Centre 100 Dalemont Road Toronto, Ont. M6B 3C9	W.M. Day	787-1171
15	Media Services Centre North York Bd. of Ed. 85 Perkhaw Ave. Willowdale, Ont.	Douglas Pettem	225-4601
16	Lyndwood Teacher Centre 498 Hartsdale Ave. Mississauga, Ont. L5G 2G6	Eleanor Serson	274-1231
17	Earlscliffe Teacher Centre 50 Earlscliffe Circle Brampton, Ont.	John Berges	453-8329

- | | | | |
|----|---|------------------|----------|
| 18 | Windsor Separate
School Board
1485 Janette Ave.
Windsor, Ont.
N8X 1Z2 | Dr. Nancy Murray | 253-2481 |
| 19 | Teacher Centre
Kane Sr. Public School
300 Kane Ave.
Toronto, Ont.
M6M 3P1 | Robin Rigby | 653-2350 |
| 20 | Teachers' Centre
110 First St.
Welland, Ont.
L3B 4S2 | Daina Salciunas | 735-6313 |

THE ATLANTIC PROVINCES

- | | | | |
|---|--|------------------------|----------|
| 1 | Rockwood Park
Teachers' Centre
P.O. Box 1227
Saint John, N.B.
E2L 4G7 | Lorna Hutchinson | 642-6252 |
| 2 | Community Arts Centre
Middle Sackville, N.B.
EOA 2E0 | Wendy Burnett | 536-2678 |
| 3 | Halifax Teachers'
Resource Centre
6225 Chebucto Road
Halifax, N.S.
B3L 1K7 | R.F. Edwards-Daugherty | 426-6773 |
| 4 | Kings County
Teachers' Centre
Highbury Road
New Minas, N.S. | David Maddock | 678-8361 |

Appendix D: An Analysis of The Raw Data

The following tables and graphs present a breakdown of the raw data as drawn from frequency distributions and crosstabulations, using the Statistical Package for the Social Sciences.

Summaries of the data presented here are given in Chapter 4.

The tables and graphs are presented in six parts, representing A: Policy, B: Access to and Usage of Products and Services, C: Staffing, D: Facilities, E: Program Ranking and Effectiveness, and F: Decision Making.

Table A1: An Analysis of Teachers' Centres Policy in B.C.

POLICY	TOTAL RESP.	RESPONSE RANGES					MEAN	PRIORITY
		(5)	(4)	(3)	(2)	(1)		
1	5	100	0	0	0	0	5.000	1
2	4	50	50	0	0	0	4.500	2.5
3	3	33	0	67	0	0	3.667	6
4	3	0	0	100	0	0	3.000	10
5	4	0	50	25	25	0	3.250	9
6	4	50	50	0	0	0	4.500	2.5
7	4	0	50	50	0	0	3.500	7.5
8	4	0	50	50	0	0	3.500	7.5
9	4	25	75	0	0	0	4.250	5
10	3	67	0	33	0	0	4.333	4

RESPONSE CODE

(5) Always (4) Usually (3) Sometimes
 (2) Rarely (1) Never

Table A2: An Analysis of Teachers' Centre Policy in Alberta

POLICY	TOTAL RESP.	RESPONSE %AGES					MEAN	PRIORITY
		(5)	(4)	(3)	(2)	(1)		
1	3	100	0	0	0	0	5.000	2.5
2	3	100	0	0	0	0	5.000	2.5
3	3	0	33	67	0	0	3.333	8.5
4	3	33	0	67	0	0	3.667	7
5	3	33	33	33	0	0	4.000	5.5
6	3	100	0	0	0	0	5.000	2.5
7	3	0	33	67	0	0	3.333	8.5
8	3	0	0	67	33	0	2.667	10
9	3	100	0	0	0	0	5.000	2.5
10	3	33	33	33	0	0	4.000	5.5

RESPONSE CODE

(5) Always (4) Usually (3) Sometimes
 (2) Rarely (1) Never

Table A6: An Analysis of Teachers' Centre Policy in Canada

POLICY	TOTAL RESP.	RESPONSE %AGES					MEAN	PRIORITY
		(5)	(4)	(3)	(2)	(1)		
1	45	78	16	7	0	0	4.711	1
2	43	30	35	26	5	5	3.814	5
3	38	10	16	74	0	0	3.368	8
4	41	12	29	56	2	0	3.512	7
5	45	9	36	40	13	2	3.356	9
6	45	51	42	7	0	0	4.444	2
7	42	10	40	45	5	0	3.548	6
8	43	2	21	44	28	5	2.884	10
9	41	49	34	10	7	0	4.244	3
10	40	30	30	32	8	0	3.825	4

RESPONSE CODE

(5) Always (4) Usually (3) Sometimes
 (2) Rarely (1) Never

Table B1: An Analysis of Centre Usage in B.C.

USER	ACCESS TO PRODUCTS		GIVEN ACCESS TEND TO USE PRODUCTS		ACCESS TO SERVICES		GIVEN ACCESS TEND TO USE SERVICES	
	YES	NO	YES	NO	YES	NO	YES	NO
1	100	0	60	40	100	0	100	0
2	100	0	100	0	100	0	100	0
3	100	0	100	0	100	0	100	0
4	100	0	80	20	100	0	80	20
5	80	0	100	0	80	0	75	25
6	60	20	67	33	100	0	40	40
7	80	20	50	50	80	0	50	50
8	60	20	33	67	60	20	33	67

USER CODE

(1) Board Members (2) Board Staff (3) Teachers
 (4) Substitutes (5) Student Teachers (6) Parents
 (7) Teachers (8) Community Residents

N/A responses affect the total percentage in some cases.

Table B2: An Analysis of Centre Usage in Alberta

USER	ACCESS TO PRODUCTS		GIVEN ACCESS TEND TO USE PRODUCTS		ACCESS TO SERVICES		GIVEN ACCESS TEND TO USE SERVICES	
	YES	NO	YES	NO	YES	NO	YES	NO
1	100	0	0	100	100	0	0	100
2	100	0	33	67	100	0	33	67
3	100	0	100	0	100	0	100	0
4	100	0	67	33	100	0	67	33
5	100	0	100	0	100	0	100	0
6	67	33	50	50	67	33	50	50
7	33	67	0	100	33	67	0	100
8	100	0	33	67	100	0	33	67

USER CODE

(1) Board Members
 (4) Substitutes
 (7) Teachers

(2) Board Staff
 (5) Student Teachers
 (8) Community Residents

(3) Teachers
 (6) Parents

Table B3: An Analysis of Centre Usage in Manitoba

USER	ACCESS TO PRODUCTS		GIVEN ACCESS TEND TO USE PRODUCTS		ACCESS TO SERVICES		GIVEN ACCESS TEND TO USE SERVICES	
	YES	NO	YES	NO	YES	NO	YES	NO
1	93	0	23	77	93	0	38	62
2	79	14	64	36	79	14	73	27
3	93	0	100	0	93	0	100	0
4	93	0	38	62	93	0	46	54
5	93	0	69	31	93	0	77	23
6	50	36	14	86	64	29	33	67
7	57	29	25	62	64	29	56	44
8	36	57	40	60	50	36	57	43

USER CODE

- | | | |
|-------------------|-------------------------|--------------|
| (1) Board Members | (2) Board Staff | (3) Teachers |
| (4) Substitutes | (5) Student Teachers | (6) Parents |
| (7) Teachers | (8) Community Residents | |

N/A responses affect the percentages in some cases.

Table B4: An Analysis of Centre Usage in Ontario

USER	ACCESS TO PRODUCTS		GIVEN ACCESS TEND TO USE PRODUCTS		ACCESS TO SERVICES		GIVEN ACCESS TEND TO USE SERVICES	
	YES	NO	YES	NO	YES	NO	YES	NO
1	95	5	11	89	90	10	28	72
2	95	0	58	42	85	15	76	24
3	100	0	100	0	90	0	100	0
4	90	10	61	39	90	10	56	44
5	80	15	69	31	75	20	67	33
6	50	45	30	70	65	30	62	38
7	55	40	82	18	50	45	100	0
8	40	50	50	50	50	40	80	20

USER CODE

(1) Board Members (2) Board Staff (3) Teachers
(4) Substitutes (5) Student Teachers (6) Parents
(7) Teachers (8) Community Residents

N/A responses affect the percentages in some cases.

Table B5: An Analysis of Centre Usage in The Maritimes

USER	ACCESS TO PRODUCTS		GIVEN ACCESS TEND TO USE PRODUCTS		ACCESS TO SERVICES		GIVEN ACCESS TEND TO USE SERVICES	
	YES	NO	YES	NO	YES	NO	YES	NO
1	75	25	33	67	100	0	75	25
2	75	25	67	33	100	0	75	25
3	100	0	100	0	100	0	100	0
4	100	0	75	25	100	0	50	50
5	50	50	100	0	100	0	75	25
6	25	75	100	0	25	75	0	100
7	25	75	100	0	25	75	100	0
8	25	75	0	100	50	50	100	0

USER CODE

- | | | |
|-------------------|-------------------------|--------------|
| (1) Board Members | (2) Board Staff | (3) Teachers |
| (4) Substitutes | (5) Student Teachers | (6) Parents |
| (7) Teachers | (8) Community Residents | |

Table B6: An Analysis of Centre Usage in Canada

USER	ACCESS TO PRODUCTS		GIVEN ACCESS TEND TO USE PRODUCTS		ACCESS TO SERVICES		GIVEN ACCESS TEND TO USE SERVICES	
	YES	NO	YES	NO	YES	NO	YES	NO
1	93	4	21	79	93	4	42	58
2	89	6	61	39	87	6	75	25
3	98	0	100	0	94	0	100	0
4	96	2	57	43	93	4	56	44
5	83	11	76	24	85	9	74	26
6	50	41	35	65	65	30	47	50
7	54	39	56	40	54	39	72	28
8	44	48	40	60	54	35	64	36

USER CODE

- (1) Board Members (2) Board Staff (3) Teachers
 (4) Substitutes (5) Student Teachers (6) Parents
 (7) Teachers (8) Community Residents
 (5)-Student Teachers (6)-Parents (7)-Students
 (8)-Community Residents

N/A responses affect the percentages in some cases.

Graph B1: Crosstabulation of
Province with 'Board Use of Services, Given Access'

		BOARD USE OF SERVICES					
		I YES			NO		
P R O V I N C E		I	5	I	0	I	5
	B.C.	I	5	I	0	I	5
	ALTA.	I	0	I	3	I	3
	MAN.	I	5	I	8	I	13
	ONT.	I	5	I	13	I	18
	ATL.	I	3	I	1	I	4
			18		25		43

Chi Square = 12.43794 with 4 Degrees of Freedom
Significance=0.0144

Graph C1: Crosstabulation of
Province with Voluntary Staffing

		VOLUNTARY STAFFING					
		YES		NO			
		I	1.	I	2.	I	
		I		I		I	
		I		I		I	
P R O V I N C E	B.C.	I	0	I	5	I	5
	ALTA.	I	0	I	3	I	3
	MAN.	I	4	I	10	I	14
	ONT.	I	0	I	20	I	20
	ATL.	I	2	I	2	I	4
			6		40		46

Chi Square = 11.99285 with 4 Degrees of Freedom
Significance=0.0174

Table D1: An Comparison of the Hours
of Centre Operation Across Canada

	BC	ALTA	MAN	ONT	ATL	CANADA
-before school	100	100	50	65	75	67
-during school	100	100	86	90	75	89
-after school	100	100	93	95	100	96
-evenings	100	67	71	75	100	78
-Saturdays	40	33	57	25	100	44

Table D2: An Comparison of the Facilities
Available in Centres Across Canada

	BC	ALTA	MAN	ONT	ATL	CANADA
-workshop area	100	100	86	80	100	87
-storage	100	33	64	80	100	76
-library	80	100	71	65	100	74
-lounge	60	100	71	70	75	72
-consult. area	80	67	50	75	75	67
-reading room	40	33	43	40	75	44
-pub. display	100	100	57	50	75	63
-'make & take'	40	100	71	95	100	83
-other	100	100	50	30	100	48

Table D3: A Comparison of the Hardware and Software
Available in Centres Across Canada

	BC	ALTA	MAN	ONT	ATL	CANADA
-movies	80	67	43	50	50	52
-videotapes	80	67	64	55	100	65
-filmstrips	60	67	71	70	75	70
-tapes	80	67	71	70	100	74
-records	60	33	64	60	100	63
-instr. kits	100	67	93	85	75	87
-v.t.r. equip.	80	100	57	70	75	70
-movie equip	80	67	50	65	100	65
-other	60	33	71	50	100	61

Graph D1: Crosstabulation of
Province with Location

		LOCATION											
		I	WHOLE		PART		RENTED		BOARD				
		I	N/A	SCHOOL	SCHOOL	SPACE	SPACE	OFFICE	OFFICE				
P R O V I N C E	B.C.	I	0	I	3	I	1	I	1	I	0	I	5
	ALTA.	I	0	I	1	I	1	I	0	I	1	I	3
	MAN.	I	0	I	1	I	10	I	0	I	3	I	14
	ONT.	I	3	I	2	I	13	I	0	I	2	I	20
	ATL.	I	0	I	4	I	0	I	0	I	0	I	
			3		11		25		1		6		46

Chi Square = 35.57306 with 16 Degrees of Freedom
Significance = 0.0033

Table E1: An Analysis of Centre Programming in B.C.

PROG.	TOTAL RESP.	RESPONSE RANKING - %AGE								MEAN	RANK
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1	4	25	25	0	0	25	0	25	0	3.75	3
2	4	0	0	0	25	25	25	25	0	5.50	7
3	4	0	0	0	25	0	0	0	75	7.00	8
4	4	50	0	0	0	0	25	0	25	4.00	4.5
5	4	25	0	25	25	0	25	0	0	3.50	2
6	4	0	50	25	0	25	0	0	0	3.00	1
7	4	0	0	25	0	25	25	25	0	5.25	6
8	4	0	25	25	25	0	0	25	0	4.00	4.5

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E2: An Analysis of the Perceived Degree of Effectiveness in Centre Programming in B.C.

PROGRAM	TOTAL RESP.	RESPONSE - %AGE				MEAN
		(4)	(3)	(2)	(1)	
1	4	50	25	25	0	3.250
2	4	50	25	25	0	3.250
3	4	25	25	0	50	2.250
4	4	100	0	0	0	4.000
5	4	75	25	0	0	3.750
6	4	75	25	0	0	3.750
7	4	25	75	0	0	3.250
8	4	25	75	0	0	3.250

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E3 : An Analysis of Centre Programming in Alberta

PROG.	TOTAL RESP.	RESPONSE RANKING - %AGE								MEAN	RANK
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1	3	0	0	0	0	0	0	67	33	7.33	8
2	3	0	0	33	0	0	33	33	0	5.33	6
3	3	0	0	0	0	33	33	0	33	6.33	7
4	3	33	0	0	0	0	33	0	33	5.00	5
5	3	0	0	33	0	67	0	0	0	4.33	4
6	3	33	67	0	0	0	0	0	0	1.67	1
7	3	0	0	33	67	0	0	0	0	3.67	3
8	3	33	33	0	33	0	0	0	0	2.33	2

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E4 : An Analysis of the Perceived Degree
of Effectiveness in Centre Programming in Alberta

PROGRAM RESP.	TOTAL	RESPONSE - %AGE				MEAN
		(4)	(3)	(2)	(1)	
1	2	0	50	0	50	2.000
2	3	0	67	33	0	2.667
3	2	0	50	50	0	2.500
4	3	33	33	0	33	2.667
5	2	100	0	0	0	4.000
6	3	100	0	0	0	4.000
7	3	0	100	0	0	3.000
8	3	67	33	0	0	3.667

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E5: An Analysis of Centre Programming in Manitoba

PROG.	TOTAL RESP.	RESPONSE RANKING - %AGE								MEAN	RANK
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1	8	13	0	12	25	0	0	25	25	5.25	8
2	8	13	12	13	0	12	13	25	12	4.88	6
3	9	0	22	0	11	22	11	11	22	5.22	7
4	11	27	18	18	0	18	0	9	9	3.46	2
5	9	0	22	11	0	22	22	22	0	4.78	5
6	11	45	36	0	18	0	0	0	0	1.91	1
7	8	0	0	25	38	12	25	0	0	4.38	3
8	9	11	0	33	11	11	11	0	22	4.56	4

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E6: An Analysis of the Perceived Degree
of Effectiveness in Centre Programming in Manitoba

PROGRAM RESP.	TOTAL	RESPONSE - %AGE				MEAN
		(4)	(3)	(2)	(1)	
1	10	10	10	30	50	1.800
2	11	9	27	18	46	2.000
3	11	0	27	36	36	1.909
4	11	36	9	46	9	2.727
5	11	18	36	27	18	2.545
6	11	46	46	9	0	3.364
7	11	0	46	36	18	2.273
8	11	9	36	36	18	2.364

PROGRAM CODE

(1) In-Class Consultation	(2) Curriculum Development
(3) Staff Retraining	(4) Materials Distribution
(5) On-Site Consultation	(6) Workshops
(7) Program Implementation	(8) Long Term Development Activities

Table E7: An Analysis of Centre Programming in Ontario

PROG.	TOTAL RESP.	RESPONSE RANKING - %AGE								MEAN	RANK
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1	12	33	8	8	8	0	17	17	8	3.92	3
2	11	0	9	9	36	18	9	9	9	4.73	6
3	11	0	9	0	0	36	18	0	36	6.00	7
4	12	42	8	0	8	0	17	17	8	3.75	2
5	12	0	17	25	25	17	0	8	8	4.17	4
6	12	8	42	33	17	0	0	0	0	2.58	1
7	12	17	8	8	8	25	25	8	0	4.25	5
8	12	0	0	17	0	8	17	33	25	6.25	8

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E8: An Analysis of the Perceived Degree
of Effectiveness in Centre Programming in Ontario

PROGRAM RESP.	TOTAL	RESPONSE - %AGE				MEAN
		(4)	(3)	(2)	(1)	
1	16	38	44	0	19	3.000
2	15	20	60	7	13	2.867
3	16	12	19	56	12	2.313
4	16	62	25	12	0	3.500
5	16	44	38	6	12	3.125
6	17	59	41	0	0	3.588
7	16	19	44	31	6	2.750
8	15	27	33	33	7	2.800

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E9: An Analysis of Centre Programming in The Maritimes

PROG.	TOTAL RESP.	RESPONSE RANKING - %AGE								MEAN	RANK
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1	3	0	0	0	0	33	0	0	67	7.00	7
2	3	33	0	0	33	0	33	0	0	3.67	3.5
3	3	0	33	0	0	0	33	33	0	5.00	6
4	4	25	25	25	0	0	25	0	0	3.00	2
5	3	0	0	67	0	33	0	0	0	3.67	3.5
6	4	50	25	25	0	0	0	0	0	1.75	1
7	3	0	0	0	0	0	0	67	33	7.33	8
8	4	0	25	0	50	25	0	0	0	3.75	5

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E10: An Analysis of the Perceived Degree
of Effectiveness in Centre Programming in The Maritimes

PROGRAM RESP.	TOTAL	RESPONSE - %AGE				MEAN
		(4)	(3)	(2)	(1)	
1	3	33	0	0	67	2.000
2	3	0	33	67	0	2.333
3	3	0	0	100	0	2.000
4	4	50	50	0	0	3.500
5	3	33	67	0	0	3.333
6	4	100	0	0	0	4.000
7	3	0	0	67	33	1.667
8	4	0	75	25	0	2.750

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E11: An Analysis of Centre Programming in Canada

PROG.	TOTAL RESP.	RESPONSE RANKING - %AGE								MEAN	RANK
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1	30	20	7	7	10	7	7	23	20	4.90	7
2	29	7	7	10	21	14	17	17	7	4.83	6
3	30	0	13	0	7	23	17	7	33	5.83	8
4	34	35	12	9	3	6	15	9	12	3.71	2
5	31	3	13	26	13	23	10	10	3	4.23	3
6	34	26	41	18	12	3	0	0	0	2.24	1
7	30	7	3	17	20	17	20	13	3	4.67	4
8	32	6	9	19	16	9	9	16	16	4.81	5

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Table E12: An Analysis of the Perceived Degree
of Effectiveness in Centre Programming in Canada

PROGRAM RESP.	TOTAL	RESPONSE - %AGE				MEAN
		(4)	(3)	(2)	(1)	
1	35	29	29	11	31	2.543
2	36	17	44	19	19	2.583
3	36	8	22	47	22	2.167
4	38	55	21	18	5	3.263
5	36	42	36	11	11	3.083
6	39	64	33	3	0	3.615
7	37	11	49	30	11	2.595
8	37	22	43	27	8	2.784

PROGRAM CODE

- | | |
|----------------------------|--------------------------------------|
| (1) In-Class Consultation | (2) Curriculum Development |
| (3) Staff Retraining | (4) Materials Distribution |
| (5) On-Site Consultation | (6) Workshops |
| (7) Program Implementation | (8) Long Term Development Activities |

Graph E1: Crosstabulation of
 Program Effectiveness with Program Ranking
 for In-Class Consultation

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF	EFF.						
		I	0.	I	(1)	I	(2)	I	(3)	I	(4)	I	
		I		I		I		I		I		I	
R A N K I N G	0.	I	6	I	6	I	0	I	4	I	0	I	16
	1.	I	1	I	0	I	0	I	1	I	4	I	6
	2.	I	0	I	0	I	0	I	0	I	2	I	2
	3.	I	1	I	0	I	0	I	0	I	1	I	2
	4.	I	0	I	0	I	1	I	1	I	1	I	3
	5.	I	0	I	0	I	0	I	1	I	1	I	2
	6.	I	1	I	0	I	0	I	1	I	0	I	2
	7.	I	1	I	2	I	3	I	1	I	0	I	7
	8.	I	1	I	3	I	0	I	1	I	1	I	6
			11		11		4		10		10		

Chi Square = 47.56288 with 32 Degrees of Freedom
 Significance = 0.0377

Graph E2: Crosstabulation of
Program Effectiveness with Program Ranking
for Curriculum Development

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF.	EFF.						
		I											
		I	0.	I (1)	I (2)	I (3)	I (4)	I					
		I											
R A N K I N G	0.	I	8	I	4	I	2	I	3	I	0	I	17
	1.	I	0	I	0	I	0	I	1	I	1	I	2
	2.	I	0	I	0	I	0	I	2	I	0	I	2
	3.	I	0	I	0	I	0	I	2	I	1	I	3
	4.	I	0	I	0	I	1	I	3	I	2	I	6
	5.	I	1	I	0	I	2	I	1	I	0	I	4
	6.	I	0	I	1	I	2	I	1	I	1	I	5
	7.	I	1	I	0	I	0	I	3	I	1	I	5
	8.	I	0	I	2	I	0	I	0	I	0	I	2
			10		7		7		16		6		

Chi Square = 46.39020 with 32 Degrees of Freedom

Significance = 0.0480

Graph E3: Crosstabulation of
Program Effectiveness with Program Ranking
for Staff Development

		EFFECTIVENESS					
		I N/A	VERY		MARG.	IN-	
		I	EFF.	EFF.	EFF.	EFF.	
		I					
		I	I (1)	I (2)	I (3)	I (4)	I
		I	I	I	I	I	I
R A N K I N G	0.	I 7	I 3	I 3	I 2	I 1	I 16
	2.	I 0	I 0	I 2	I 1	I 1	I 4
	4.	I 0	I 0	I 0	I 2	I 0	I 2
	5.	I 0	I 0	I 5	I 2	I 0	I 7
	6.	I 1	I 0	I 3	I 1	I 0	I 5
	7.	I 0	I 0	I 2	I 0	I 0	I 2
	8.	I 2	I 5	I 2	I 0	I 1	I 10
		10	8	17	8	3	46

Chi Square = 38.84889 with 24 Degrees of Freedom

Significance = 0.0283

Graph E4: Crosstabulation of
 Program Effectiveness with Program Ranking
 for Distribution of Materials

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF.	EFF.						
		I	0.	I (1)	I (2)	I (3)	I (4)	I					
R A N K I N G	0.	I	6	I	0	I	3	I	2	I	1	I	12
	1.	I	0	I	0	I	1	I	1	I	10	I	12
	2.	I	1	I	0	I	1	I	1	I	1	I	4
	3.	I	0	I	0	I	1	I	0	I	2	I	3
	4.	I	0	I	0	I	0	I	0	I	1	I	1
			8		2		7		8		21		46

Chi Square = 56.09416 with 32 Degrees of Freedom

Significance = 0.0053

Graph E5: Crosstabulation of
Program Effectiveness with Program Ranking
for On-Site Consultation

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF.	EFF.						
		I											
		I	0.	I (1)	I (2)	I (3)	I (4)	I					
		I											
R A N K I N G	0.	I	6	I	4	I	1	I	2	I	2	I	15
	1.	I	0	I	0	I	0	I	0	I	1	I	1
	2.	I	0	I	0	I	0	I	2	I	2	I	4
	3.	I	0	I	0	I	1	I	2	I	5	I	8
	4.	I	1	I	0	I	0	I	1	I	2	I	4
	5.	I	2	I	0	I	1	I	2	I	2	I	7
	6.	I	1	I	0	I	0	I	2	I	0	I	3
	7.	I	0	I	0	I	1	I	2	I	0	I	3
	8.	I	0	I	0	I	0	I	0	I	1	I	1
			10		4		4		13		15		46

Chi Square = 33.31264 with 32 Degrees of Freedom

Significance = 0.4032

Graph E6: Crosstabulation of
 Program Effectiveness with Program Ranking
 for Workshops and Other In-Service Activities

		EFFECTIVENESS									
		I	N/A	MARG.		IN-					
		I		EFF.	EFF.	EFF.	EFF.				
		I									
		I	0.	I (2)	I (3)	I (4)	I				
		I									
R A N K I N G	0.	I	5	I	0	I	3	I	4	I	12
	1.	I	0	I	0	I	3	I	6	I	9
	2.	I	1	I	1	I	2	I	10	I	14
	3.	I	1	I	0	I	1	I	4	I	6
	4.	I	0	I	0	I	3	I	1	I	4
	5.	I	0	I	0	I	1	I	0	I	1
				7		1		13		25		46

Chi Square = 20.15666 with 15 Degrees of Freedom

Significance = 0.1660

Graph E7: Crosstabulation of
Program Effectiveness with Program Ranking
for Curriculum Implementation

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF.	EFF.						
		I	0.	I (1)	I (2)	I (3)	I (4)	I	I				
		I	I	I	I	I	I	I	I				
R A N K I N G	0.	I	7	I	3	I	2	I	3	I	1	I	16
	1.	I	0	I	0	I	0	I	1	I	1	I	2
	2.	I	0	I	0	I	0	I	1	I	0	I	1
	3.	I	0	I	0	I	1	I	4	I	0	I	5
	4.	I	1	I	0	I	1	I	4	I	0	I	6
	5.	I	0	I	0	I	1	I	2	I	2	I	5
	6.	I	0	I	0	I	4	I	2	I	0	I	6
	7.	I	1	I	1	I	1	I	1	I	0	I	4
	8.	I	0	I	0	I	1	I	0	I	0	I	1
			9		4		11		18		4		46

Chi Square = 41.23906 with 32 Degrees of Freedom

Significance = 0.1269

Graph E8: Crosstabulation of
 Program Effectiveness with Program Ranking
 for Long Term Professional Development Programs

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF.	EFF.						
		I	0.	I (1)	I (2)	I (3)	I (4)						
		I											
R A N K I N G	0.	I	6	I	2	I	2	I	2	I	2	I	14
	1.	I	1	I	0	I	0	I	1	I	0	I	2
	2.	I	0	I	0	I	1	I	1	I	1	I	3
	3.	I	1	I	0	I	1	I	2	I	2	I	6
	4.	I	0	I	0	I	0	I	4	I	1	I	5
	5.	I	0	I	0	I	2	I	1	I	0	I	3
	6.	I	0	I	0	I	1	I	2	I	0	I	3
	7.	I	0	I	0	I	0	I	3	I	2	I	5
	8.	I	1	I	1	I	3	I	0	I	0	I	5
			9		3		10		16		8		46

Chi Square = 36.02432 with 32 Degrees of Freedom

Significance = 0.2857

Graph E9: Crosstabulation of
Program Ranking with Perceived Effectiveness
for All Responses

		EFFECTIVENESS											
		I	N/A	VERY		MARG.	IN-						
		I		EFF.	EFF.	EFF.	EFF.						
		I											
		I	0.	I (1)	I (2)	I (3)	I (4)						
		I											
R A N K I N G	0.	I	51	I	22	I	13	I	21	I	11	I	118
	1.	I	2	I	0	I	1	I	8	I	23	I	34
	2.	I	2	I	0	I	5	I	10	I	17	I	34
	3.	I	3	I	0	I	4	I	11	I	15	I	33
	4.	I	2	I	0	I	3	I	18	I	8	I	31
	5.	I	4	I	0	I	11	I	10	I	6	I	31
	6.	I	3	I	1	I	10	I	12	I	3	I	29
	7.	I	3	I	3	I	8	I	10	I	5	I	29
	8.	I	4	I	13	I	6	I	2	I	4	I	29
			74		39		61		102		92		368

Chi Square = 204.93268 with 32 Degrees of Freedom

Significance=0.0000

Table F1: An Analysis of Decision-Making in B.C.

%AGE INVOLVEMENT IN DECISION MAKING						
AREA	BOARD	SCHOOL ADMIN.	CENTRE DIRECTOR	TEACHERS	OTHERS	
1	60	0	60	80	20	
2	100	0	40	40	20	
3	80	0	40	20	40	
4	100	0	40	0	0	
5	80	0	40	20	40	
6	80	0	40	20	20	
7	80	0	80	20	40	

AREA CODE

- | | |
|----------------------------|----------------------|
| (1) Materials | (2) Workshops |
| (3) Curriculum Development | (4) Job Descriptions |
| (5) Staffing | (6) Facilities |
| (7) Hours Open | |

Table F2: An Analysis of Decision-Making in Alberta

%AGE INVOLVEMENT IN DECISION MAKING					
AREA	BOARD	SCHCOL ADMIN.	CENTRE DIRECTOR	TEACHERS	OTHERS
1	33	0	100	33	0
2	33	0	33	67	0
3	67	0	33	33	0
4	33	33	100	67	33
5	100	0	0	50	0
6	33	0	67	0	0
7	33	0	100	0	0

AREA CODE

(1) Materials

(3) Curriculum Development

(5) Staffing

(2) Workshops

(4) Job Descriptions

(6) Facilities

(7) Hours Open

Table F3: An Analysis of Decision-Making in Manitoba

%AGE INVOLVEMENT IN DECISION MAKING					
AREA	BOARD	SCHOOL ADMIN.	CENTRE DIRECTOR	TEACHERS	OTHERS
1	21	7	64	79	36
2	29	0	57	93	21
3	33	0	50	83	8
4	70	0	50	50	10
5	75	0	42	42	17
6	57	7	57	79	29
7	25	0	67	75	8

AREA CODE

(1) Materials

(3) Curriculum Development

(5) Staffing

(2) Workshops

(4) Job Descriptions

(6) Facilities

(7) Hours Open

Table F4: An Analysis of Decision-Making in Ontario

WAGE INVOLVEMENT IN DECISION MAKING						
AREA	BOARD	SCHOOL ADMIN.	CENTRE DIRECTOR	TEACHERS	OTHERS	
1	20	15	75	40	40	
2	45	10	70	55	35	
3	89	11	33	11	11	
4	84	10	37	5	16	
5	89	11	22	0	0	
6	83	11	44	6	17	
7	78	17	39	6	17	

AREA CODE

- | | |
|----------------------------|----------------------|
| (1) Materials | (2) Workshops |
| (3) Curriculum Development | (4) Job Descriptions |
| (5) Staffing | (6) Facilities |
| (7) Hours Open | |

Table F5: An Analysis of Decision-Making in the Maritimes

%AGE INVOLVEMENT IN DECISION MAKING						
AREA	BOARD	SCHOOL ADMIN.	CENTRE DIRECTOR	TEACHERS	OTHERS	
1	0	0	100	75	50	
2	0	0	100	50	75	
3	25	0	50	50	50	
4	50	0	50	25	25	
5	50	0	50	25	0	
6	25	0	75	75	50	
7	25	0	100	50	25	

AREA CODE

(1) Materials

(3) Curriculum Development

(5) Staffing

(2) Workshops

(4) Job Descriptions

(6) Facilities

(7) Hours Open

Table F6: An Analysis of Decision-Making in Canada

%AGE INVOLVEMENT IN DECISION MAKING					
AREA	BOARD	SCHOOL ADMIN.	CENTRE DIRECTOR	TEACHERS	OTHERS
1	24	9	74	59	35
2	41	4	63	65	30
3	64	5	40	38	17
4	76	7	46	22	15
5	80	5	32	20	10
6	66	7	52	36	23
7	55	7	62	31	17

AREA CODE

(1) Materials

(3) Curriculum Development

(5) Staffing

(2) Workshops

(4) Job Descriptions

(6) Facilities

(7) Hours Open

Graph F1: Crosstabulation of
Province with
'Board Helps Choose Workshops'

		BOARD HELPS CHOOSE WORKSHOPS					
		I	YES	NO			
		-----I-----I-----I					
P R O V I N C E	1.	I	5	I	0	I	5
			-----I-----I-----I				
	2.	I	1	I	2	I	3
			-----I-----I-----I				
	3.	I	4	I	10	I	14
		-----I-----I-----I					
4.	I	9	I	11	I	20	
		-----I-----I-----I					
5.	I	0	I	4	I	4	
		-----I-----I-----I					
COLUMN			19		27		46

Chi Square = 11.04760 with 4 Degrees of Freedom
Significance=0.0260

Graph F2: Crosstabulation of
Province with 'Teachers Help Decide Areas
of Curriculum Development'

		TEACHERS HELP DECIDE CURR. DEV								
		I		YES		NO				
		-----I-----	I-----	I-----	I-----	I-----	I-----	I-----	I-----	
P R O V I N C E	B.C.	I	0	I	1	I	4	I	5	
	ALTA.	-I-----	I	0	I	1	I	2	I	3
	MAN.	-I-----	I	2	I	10	I	2	I	14
	ONT.	-I-----	I	2	I	2	I	16	I	20
	ATL.	-I-----	I	0	I	2	I	2	I	4
			-I-----	4	I-----	16	I-----	26	I-----	46

Chi Square = 18.04611 with 8 Degrees of Freedom
Significance = 0.0209

Graph F3: Crosstabulation of
Province with 'Teachers Help
Define Job Descriptions'

		TEACHERS HELP DEFINE JOB DISC.							
		I		YES		NO			
		I	I	I	I	I	I	I	I
P R O V I N C E	B.C.	I	0	I	0	I	5	I	5
	ALTA.	I	0	I	2	I	1	I	3
	MAN.	I	4	I	5	I	5	I	14
	ONT.	I	1	I	1	I	18	I	20
	ATL.	I	0	I	1	I	3	I	4
		5		9		32			

Chi Square = 19.20488 with 8 Degrees of Freedom
Significance = 0.0138

Graph F4: Crosstabulation of Province with 'Teachers Help Determine Facilities'

		TEACHERS HELP DETERMINE FACILITIES							
		I				NO			
		YES		NO		YES		NO	
		I	0	I	1	I	4	I	5
P R O V I N C E	B.C.	I	0	I	1	I	4	I	5
	ALTA.	I	0	I	0	I	3	I	3
	MAN.	I	0	I	11	I	3	I	14
	ONT.	I	2	I	1	I	17	I	20
	ATL.	I	0	I	3	I	1	I	4
		2		16		28		46	

Chi Square = 26.02750 with 8 Degrees of Freedom
Significance = 0.0010

Graph F5: Crosstabulation of
Control with Province

		PROVINCE						
		B.C.	ALTA.	MAN.	ONT.	ATLA.		
C O N T R O L E F F I N A N C E	3.	1	0	0	1	0	2	
	4.	1	0	0	5	0	6	
	5.	0	0	1	6	1	8	
	6.	0	2	2	6	0	10	
	7.	2	0	4	1	0	7	
	8.	1	0	4	1	0	6	
	9.	0	1	0	0	2	3	
	10.	0	0	1	0	0	1	
	11.	0	0	1	0	0	1	
	12.	0	0	1	0	1	2	
			5	3	14	20	4	46

Chi Square = 56.97545 with 36 Degrees of Freedom
Significance=0.0145

**Table G1: A Comparison of the Types of Needs Assessment
Done in Centres Across Canada**

METHOD	B.C.	ATLA	MAN	ONT	ATL	CANADA
-formal asses.	60%	33%	50%	55%	25%	46%
-informal asses.	0%	0%	14%	30%	25%	20%
-administration	40%	0%	0%	5%	0%	6%
-advisory board	40%	33%	14%	10%	0%	15%
-personal contact	0%	33%	43%	10%	75%	26%
-requests	0%	0%	7%	15%	0%	9%

- (1) Formal Assessment - includes surveys, questionnaires, review of services, analyses
- (2) Informal Assessment - includes hunches, verbal feedback
- (3) Administration - includes principals, consultants
- (4) Advisory Board - includes staff of centre, steering committee
- (5) Personal Contact - includes representative meetings, school visits
- (6) Requests - includes individual and group requests

N.B. Percentages may not total 100% in all cases since all forms of needs assessment used have been considered in drawing up this table.

Graph G1: Crosstabulation of
Province with Types of Needs Assessment

TYPES OF NEEDS ASSESSMENT

	I	I	I	I	I	I	I	I	I	I	I
	N/A	FORMAL	IN- FORMAL	ADVIS. BOARD	CONTACT	REQUEST					
B.C.	2	1	0	2	0	0					5
ALTA.	0	1	0	1	1	0					3
MAN.	1	7	0	1	4	1					14
ONT.	1	9	5	2	0	3					20
ATL.	0	1	0	0	3	0					4
	4	19	5	6	8	4					46

Chi Square = 34.46361 with 20 Degrees of Freedom
Significance=0.0232

Graph G2: Crosstabulation of Province
with Use of Administrative Input

in Needs Assessment

	ADMINISTRATIVE INPUT					
	NO			YES		
	I		I		I	
B.C.	I	3	I	2	I	5
ALTA.	I	3	I	0	I	3
MAN.	I	14	I	0	I	14
ONT.	I	19	I	1	I	20
ATL.	I	4	I	0	I	4
		43		3		46

Chi Square = 10.73333 with 4 Degrees of Freedom
Significance=0.0297

Graph G3: Crosstabulation of Province
with Personal Contact as a Means
of Needs Assessment

	PERSONAL CONTACT					
	I	NO	YES	I		
B.C.	I	5	I	0	I	5
ALTA.	I	2	I	1	I	3
MAN.	I	8	I	6	I	14
ONT.	I	18	I	2	I	20
ATL.	I	1	I	3	I	4
COLUMN		34		12		46

Chi Square = 11.53597 with 4 Degrees of Freedom
Significance=0.0212

Graph G4: Crosstabulation of Province
 with 'Visits as a Means
 of Distributing Materials'

	VISITS		
	I YES	NO	
B.C.	1	4	5
ALTA.	0	3	3
MAN.	0	14	14
ONT.	9	11	20
ATL.	0	4	4
	10	36	46

Chi Square = 12.20277 with 4 Degrees of Freedom
 Significance=0.0159

Graph G5: Crosstabulation of Province
with Use of Displays to Distribute Materials

	DISPLAY				
	I	YES	I	NO	
B.C.	I	2	I	3	I 5
ALTA.	I	0	I	3	I 3
MAN.	I	2	I	12	I 14
ONT.	I	1	I	19	I 20
ATL.	I	3	I	1	I 4
		8		38	46

Chi Square = 13.88213 with 4 Degrees of Freedom
Significance=0.0077

Appendix E: The Defined and Implied Roles of the Teachers'

Centres Examined in the Survey

Following are the responses given by centre directors in answer to a request for the role of the centre as defined, and for any implicit role that might go beyond the defined role. Centres are numbered as in the address list given in Appendix C. The defined role is given first, and the implicit role, if there is one, follows in parentheses.

British Columbia

1. The teachers' centre is the sum of its parts. Each component has its defined role.
2. To enhance the professional growth and development of all professional staff in the district. To develop, review, supplement and implement curriculum. (To develop individual and organizational potential.)
3. To provide a comprehensive service package of support facilities and resources with a decided emphasis on staff development.
4. To provide supportive services to the district educational programs by facilitating curriculum implementation, in-service programs and professional development; the evaluation, acquisition, circulation and storage of supplementary instructional materials; and to house the

school district's communication systems. (The centre is called upon to provide many services that are required by the district but are either tedious or too mundane to be carried out by the people that originate the perceived need.)

5. Service in all areas of curriculum to teachers.

Alberta

1. To provide a place to work and have workshops. (To be a sounding board.)
2. To provide direct services to teachers: a meeting place; collection and distribution of materials; technical and consultation services.
3. To provide services, encourage collegial sharing of materials, exchange of ideas; general professional development.

Manitoba

1. TLRC is to provide support services to the library/media services and consultant services in all areas of program in the Division. ERC are designed to provide specific and specialized consultant support services directly to the classroom teachers. (Leadership in methodology and content development with articulation K-12. Encouragement in

professional self-evaluation and growth of individual teachers.)

2. To provide support services to classroom teachers and school staffs, to coordinate workshops, special projects and displays, to encourage teacher participation, to select materials.
3. To provide professional library services, meeting spaces, work space, display space, in-service and curriculum development. (Liason between superintendent's department and staff.)
4. To provide professional development activities to teachers from K-12. (It is up to the coordinator to initiate, organize, publicize, and evaluate all P.D. activities which go on in the School Division.)
5. To improve classroom instruction by providing a focus and some resources.
6. To provide make-and-take, duplication and laminating services to the professional staff. To provide a meeting area for small group meetings. (To expand operations to other areas and to build up teacher response to the teachers' centre functions.)
7. A place designed for those interested in learning.
8. To assist in the professional development of teachers.
9. Mainly for holding P.D. workshops. (Lifeskills)
10. To provide an area for meetings, workshops, in-service, and

other professional development activities.

11. To bring support services to the schools.
12. Acting as an ad hoc committee of the P.D. Committee of the Local Teachers' Society. Originated as an extension of the Special Education/ Reading Consultant's office using a R.E.A.P. (Rural Education Alternatives Program) grant. (To try to meet some of the teachers' needs in P.D., zeroing in mainly on small groups, and offering workshops on weekends and in the evening. To try to provide a variety of alternate materials, on loan, for classroom use.)
13. The centre is a materials resource facility and a location for meetings of teachers. (The director is expected to have some knowledge of reading programs, and to maintain files of periodicals related to administration as well as professional areas.)
14. The teachers' centre is a meeting and workhouse as well as a resource centre for all Hanover teachers. It is the home of the files and records of the Teachers' Association.

Ontario

1. In-service location, professional library, display of curriculum approved material, circulation of learning kits and AV kits, teacher preparation area. (To be a source of information for any requests regarding materials; to be a

meeting and office area for consultative staff.)

2. A principal, teacher and school team resource; a place for in-service advice and assistance; curriculum development and evaluation; an asset to curriculum implementation. (An area of support, development and improvement.)
3. A place where a teacher will find materials, workshops, and people who will help him or her become more effective in the classroom. (Flexibility to change as different needs are expressed by teachers.)
4. Depending on area needs, to establish resources that schools could not afford and to inform teachers in the effective use of media in their classrooms. (Making teachers aware of objectives, content strategies and evaluation of the whole and its parts, and that all media is used in relation to the above according to the needs and abilities of the student.)
5. Curriculum initiation, implementation, implanting, and evaluation.
6. To facilitate the use of instructional materials in aiding teachers to grow professionally. (Staff professional development.)
7. To provide an Instructional Media Centre for schools located in northern area; offices for Special Education Coordinator, APSW and technician; a meeting place, small workshops, distribution of curriculum materials.
8. To provide professional inter-action for teachers; to

provide resource materials to support classroom teachers' programs.

9. To provide professional services to teachers. To provide the best possible A.V. services that available funds will supply.
10. A place where teachers can learn about children and teaching, and grow. (Professional development.)
11. To improve the quality of instruction in the school. (Assistance to teachers in specialized areas of curriculum.)
12. To serve the schools of the area; provide resources, workshops, etc.
13. Primarily a centre for workshops, conferences, seminars, etc. The specific role of the consultant lies within staff development in terms of organizational development, team building, communication, goal setting, process workshops, and content workshops.
14. To provide materials and services to teachers for improvement of classroom instruction; includes acquisition and production of materials, consultative services, and in-service training.
15. To provide leadership for teachers.
16. Program implementation, teacher assistance, curriculum design. (Teachers' counselling.)
17. The teachers' centre is a resource centre for teachers, an examination centre of new materials to try out, a place to

make learning aides to produce lessons, tapes, etc; to borrow books, films; to meet teachers, to take in a workshop to listen to a noted educator, to bring the family, to take a university course in a curriculum area of interest - the scope for professional development is open and flexible and responds to new needs and to new opportunities. (All professional development activities. All curriculum materials development and distribution.)

18. To provide in-service programs for teaching and non-teaching staff. To provide facilities for P.D. programs, workshops, etc. To provide an area for the preparation and display of learning materials. To provide an internship program for teacher enrichment. (To act as liason between teaching staff, consultative staff and administration. To rejuvenate teaching staff at a time when no new teachers are coming into the system due to declining enrollment.)
19. To offer support to teachers by the provision of displays, commercial materials, workshops, meeting space, and classroom ideas. To encourage sharing among teachers in these areas. (To serve the needs of teachers, thereby serving the needs of children. To offer a vehicle to build up community effort among various educational groups as an effort to combat the growing operation of groups as isolated units.)

The Maritimes

1. A teachers' centre is a local physical facility in which programs are organized and operated primarily by teachers. They are conceived as a means of improving and furthering professional development by providing an opportunity for interaction among teachers in various ways. (It is implicit that we try to serve teachers in any reasonable way.)
2. The goal of the Community Arts Centre is to go beyond exposure to basic skills in the arts and crafts - to stretch the teachers' and students' imaginations, to encourage them to learn new concepts, and to help them become aware of their own creativity. (Teachers should not only use the centre workshops to enhance their programmes, but must be prompted to use the resources of the centre on their own initiative.)
3. To provide a place for meetings, work, materials and equipment, technical advice, and assistance. To provide opportunities for the exchange of ideas.

4. Professional development facilities for the exchange of ideas; a source of new resource materials; a repository of complementary teaching materials; a resource for material and programme development; in-service. (The centre provides the opportunity for a select group of teachers - directors and school representatives - to grow professionally in an intimate administrative way. This growth results from their involvement with teachers and planning the development for other teachers - they direct their own development.)

**Appendix F: Developmental and Research Activities Undertaken by
Teachers' Centres in Canada**

Following is a list of developmental and research activities as given by the centres surveyed. Centres are numbered as in the address list given in Appendix C.

British Columbia

1. a. Developmental Activities: The centre undertakes no development activities. People undertake activities using the facilities at the centre.
b. Research: People use the teachers' professional library in a number of ways, some of which are probably research.
2. a. Developmental Activities: Curriculum development; staff development.
b. Research: Implementation of Elementary Science, evaluation of inservice on slow learners; pilot testing of curriculum programs on cancer education, decision making and reading programs; analysis of specific teachers' behaviours.
3. a. Developmental Activities: Supervisors participate in committees to reach decisions as to how developmental activities will be undertaken.

- b. Research: None
- 4. a. Developmental Activities: Since the arrival of the core curriculum on the educational scene, nothing has been done of any significant nature.
- b. Research: A research project involving computer booking and materials utilization is planned.
- 5. a. Developmental Activities: Considerable curriculum development.
- b. Research: None

Alberta

- 1. a. Developmental Activities: None
- b. Research: None
- 2. a. Developmental Activities: The centre does not initiate - we support. Most 'service' is offered in the language arts.
- b. Research: None
- 3. a. Developmental Activities: Various
- b. Research: None

Manitoba .

1. a. Developmental Activities: School, area, and divisional work with content groups of teachers; skills analysis and development - scope and sequence - by grade and subject; promotion of special approaches: content reading, visual literacy, outdoor education.
- b. Research: Language Arts Research Group - development of a L.A. curriculum model K-12; development of integrated learning skills modules.
2. a. Developmental Activities Primarily in the areas of program and professional development to meet evolving needs.
- b. Research: Research projects peculiar to responsibilities of particular consultants. Eg. inner city consultant - student mobility patterns, socio-economic characteristics of school communities, evaluation of migrant student program, etc.
3. a. Developmental Activities: P.D. Program affiliation.
- b. Research: Administer kit development (Youth and the Law).
4. a. Developmental Activities: Re-writing of curriculum in some of the subject areas, eg. secondary science curriculum is being reviewed this year.
- b. Research: Secondary science curriculum review.
5. a. Developmental Activities: Curriculum projects, materials development, courses, needs assessment, teaching

packages, retraining..

- b. Research: Teacher evaluation.
- 6. a. Developmental Activities: None
- b. Research: None
- 7. a. Developmental Activities: Grade 2 teachers are piloting a social studies program; otherwise very little.
- b. Research: None
- 8. a. Developmental Activities: None
- b. Research: None
- 9. a. Developmental Activities: Curriculum development, teacher effectiveness teaching.
- b. Research: None
- 10. a. Developmental Activities: Curriculum development is usually initiated through the superintendent's office.
- b. Research: None
- 11. a. Developmental Activities: Language arts; special education.
- b. Research: Depression in elementary school; Gifted education.
- 12. a. Developmental Activities: None
- b. Research: None
- 13. a. Developmental Activities: None by the centre itself - apart from programs related to the supervisor of libraries jurisdiction; the director has assisted in planning programs for gifted students.

- b. Research: None
- 14. a. Developmental Activities: None of libraries jurisdiction; the director has assisted in planning programs for gifted students.
- b. Research: None

Ontario

- 1. a. Developmental Activities: Focus of board is major focus of activities.
- b. Research: None
- 2. a. Developmental Activities: Curriculum development and evaluation.
- b. Research: Development of test bank items, subject inventories, standardized achievement tests, longitudinal studies of program effectiveness; drop out studies, etc.
- 3. a. Developmental Activities: None
- b. Research: None
- 4. a. Developmental Activities: Use of media.
- b. Research: Limited.
- 5. a. Developmental Activities: All major subject disciplines. Critical thinking skills, research techniques, social

skills.

- b. Research: 'Drop outs'.
- 6. a. Developmental Activities: Professional development; curriculum development; planned materials acquisition.
b. Research: None
- 7. a. Developmental Activities: Provide leadership in developing curriculum by coordinating sessions in which all teachers write objectives, sequence them across grades, and write test items. Introduction of new teaching strategies which fit objectives and the training of teachers in these.
b. Research: None
- 8. a. Developmental Activities: Curriculum development, resource packages, classroom support materials.
b. Research: None
- 9. a. Developmental Activities: One per year.
b. Research: None
- 10. a. Developmental Activities: Not as such; centre is involved when resource materials are being suggested.
b. Research: None
- 11. a. Developmental Activities: Primary program development.
b. Research: Signposts of Learning
- 12. a. Developmental Activities: Regional centres are adjuncts to curriculum established in main office centre and aid in implementation.

- b. Research: Informal classroom projects.
- 13. a. Developmental Activities: Curriculum, special education processes, plant facilities requirements, etc.
- b. Research: Teacher and principal evaluation, early identification of children's needs.
- 14. a. Developmental Activities: Staff development; leadership labs.
- b. Research: Survey of needs, uses, evaluation of professional activity days.
- 15. a. Developmental Activities: Focus primarily on resources.
- b. Research: Developmental technology.
- 16. a. Developmental Activities: Piloting of an English curriculum K-6; units developed on women's studies; unit and novel studies.
- b. Research: None
- 17. a. Developmental Activities: Curriculum units.
- b. Research: Gifted and talented; women's studies; early identification program; piloting language documents; language across the curriculum.
- 18. a. Developmental Activities: Writing and testing of local guides.
- b. Research: None
- 19. a. Developmental Activities: Curriculum development; group analysis.
- b. Research: None

20. a. Developmental Activities: Plans to develop a cooperative plan with the superintendent of programs and professional development committees.
- b. Research: Measurement of immediate response to workshops by feedback forms; recording of comparative response and attendance if the workshop is given in a different location in the following year.

The Maritimes

1. a. Developmental Activities: More often respond than initiate.
- b. Research: Provide space.
2. a. Developmental Activities: None
- b. Research: Research is purely accidental, from observations.
3. a. Developmental Activities: Materials design and production; program development.
- b. Research: None
4. a. Developmental Activities: Encourage interest groups to develop teaching aids and materials; offer extension courses.
- b. Research: None

Bibliography

- Adams, E. The emerging pattern. In E. Adams (Ed.), In-service education and teachers' centres. Exeter: Pergamon Press, 1975.
- Alberta Teachers' Association. Teachers' centres package no. 1: Information on teachers' centres in Manitoba, Ontario, Japan, USA, and Great Britain. Edmonton, Alta: Author, August, 1978a.
- Alberta Teachers' Association. Teachers' centre package no. 2: Teachers' centres in Alberta. Edmonton, Alta: Author, August, 1978b.
- Alberta Teachers' Association. A place to meet. Author, August, 1978c.
- Andrews, L.O. Student teaching as a springboard for in-service education. (4: The teacher education centre). Theory into Practice, 1975, 14 (1), 15-17.
- Arnold, R. A centre in Britain. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Arqathon Press, 1975.
- Atlantic Institute of Education. Lighthouse learning program: Teachers' centres. Halifax: Author, 1974.
- Aylen, D., Anderson, D., & Wideen, M. Situations and characteristics related to the adoption and implementation of innovative practices. Vancouver: Educational Research Institute of British Columbia & Simon Fraser University, 1977.
- Bailey, S.K. Teachers' centres: A British first. Phi Delta Kappan. 1971, 53(3), 146-149.
- Beach, D.M. & Mosley, J. A base for building professional competence: The Fort Worth teacher centre. Paper presented at the annual meeting, Association of Teacher Educators. Atlanta, Georgia: 1977. (ERIC Document Reproduction Service No. ED 135 747)
- Bell, H. & Peightel, J. Teacher centres and in-service education. Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1976.

- Bender, A.E. Teachers' centres in England and Wales. Intellect. March 1974, 102, 387-9.
- Bender, A.E. Centres for teachers: England and the U.S.A. Salem, Oregon: Oregon Association for Supervision and Curriculum Development, 1975. (ERIC Document Reproduction Service No. ED 113 328)
- Bennis, G. Theory and methods in applying behavioral science to planned organizational change. In C.L. Cummings & W.E. Scott (Eds.), Readings in organizational behaviour and human performance. Homewood, Ill.: Richard D. Irwin Inc, 1969.
- Biggs, E. Teachers' centres. In Atlantic Institute of Education (Ed.), Lighthouse learning program. Halifax: Atlantic Institute of Education, 1974.
- Bishop, L.J. Staff development and instructional improvement: Plans and Procedures. Boston, Mass.: Allyn and Bacon, 1976.
- Bolam, R. Innovation in the in-service education and training of teachers: Practice and theory. Paris: Centre for Educational Research and Innovation, Organization of Economic Cooperation and Development, 1978. ✓
- Bolam, R. Priorities in INSET: An international perspective. In M. Wideen, D. Hopkins & I. Pye (Eds.), In-service: A means of progress in tough times. Vancouver: Simon Fraser University, 1979
- Bolam, R. & Porter, J. Innovation in in-service education and training of teachers: United Kingdom. Centre for Educational Research and Innovation: Organization for Economic Cooperation and Development, 1976.
- Boucher, L. A centre in Maryland. in M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Brand, J. The role of teachers' centres in the in-service education of teachers. In E. Adams (Ed.), In-service education and teachers' centres. Exeter: Pergamon Press, 1975.

- British Columbia Teachers' Federation. In-service education in British Columbia: Summary of a survey. Vancouver: Author, 1978.
- The British Schools Council. An early manifesto on teacher centres: Working paper No. 10, Curriculum development: Teachers' groups and centres (in part). In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975. (Reprinted from Schools Council Working Paper No. 10, London: Her Majesty's Stationary Office, 1967.)
- The British Schools Council. A field study from a beginning teacher centre. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975. (Reprinted from Schools Council pamphlet 1, First year: An account of the work of a teachers' centre. London: Author, 1969.)
- The British Schools Council. A report on three national conferences. 1970. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975. (Reprinted from Schools Council pamphlet 6, Teachers' centres and the changing curriculum. London: Author, 1970.)
- Brugelmann, H. Teacher centres on paper? From British practice to German ideology. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Burdin, J.L. Scenario on teacher centres in the 1990's. The Journal of Teacher Education. 1974, 25(1), 40-43.
- Burnaby Teachers' Association. Results of the professional development committee needs assessment survey. Burnaby: Author, 1976.
- Burrell, D. The teachers' centre: A critical analysis. Educational Leadership. 1976, 33(6), 422-427.
- Buxton, A.P. Teacher centres - for what? English Education. 1975, 6(3), 147-150.
- Buxton, A.P. Teachers' Active Learning Centre (TALC): A case study. Educational Leadership. 1976a, 33(6), 428-433.

- Buxton, A.P. Teacher centres in Japan. Educational Leadership. 1976b, 34(3), 183-189.
- Buxton, A.P. A distinctive option in in-service, the teachers' centre needs individual needs and institutional goals. San Francisco: Teachers' Centre Exchange, 1979.
- Cassivi, D. British teachers' centres. In Atlantic Institute of Education (Ed.), Lighthouse learning program. Halifax: Atlantic Institute of Education, 1974.
- Cassivi, D. Teachers at the centre: The teachers' centre concept. Halifax, N.S.: Atlantic Institute of Education, 1978.
- Cassivi, D., & Marriott, M. A teachers' centre on Prince Edward Island. In Atlantic Institute of Education (Ed.), Lighthouse learning program. Halifax: Atlantic Institute of Education, 1974.
- Chambers, P. Curriculum development and in-service education. Report of a study conference. Bradford College, April 14, 1978.
- Church, J. In-service education. A paper presented to the Professional Development Advisory Committee of the British Columbia Teachers' Federation. Vancouver: BCTF, 1977.
- Clark, C.M. Now that you have a teachers' centre, what are you going to put into it? The Journal of Teacher Education, 1974, 25(1), 46-58.
- Coleman, P. The nature and significance of the professions. in S. Lieberman (Ed.), Education as a Profession, 1960.
- Coleman, P. Professional development: A status report. Paper presented at the Work-Study Symposium of the Ontario Institute for Studies in Education, Northwestern Centre (Thunder Bay, Ontario), 1976. (ERIC Document Reproduction Service No. ED 147 938)
- Coleman, P. The teacher centre and educational renewal. Manitoba Journal of Education, 1975, 10, 39-44.

- Collins, J.F. The teacher education centre concept: A unifying approach to teacher education. Educational Leadership. 1970, 27(6), 544-547.
- Collins, J.F. The making of a teacher centre. The Journal of Teacher Education, 1974, 25(1), 13-20.
- Covert, R.W., et al. Evaluating the four teacher centre pilots: The second annual report, 1973-1974 (Volume 1). Charlottesville, VA.: Evaluation Research Centre, Virginia University, 1974. (ERIC Document Reproduction Service No. ED 103 423)
- Cronin, J.M. Teacher centre program. Springfield: Illinois State Board of Education, April, 1977a.
- Cronin, J.M. Teacher centres. Springfield: Illinois State Board of Education, 1977b.
- Crosby, J.M. A teacher looks at teaching centres and educational reform. The Journal of Teacher Education, 1974, 25(1), 31-36.
- Crum, M.F. & Burden, J.L. The teacher centre experience around the world. In Office of Education (DHEW) (Ed.), Teachers' centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)
- Dambruch, E.L., et al. Governance of teachers' centres. Special current issues publication No. 2. Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1975.
- Davis, J.B. The teacher's centre as a strategy for local school renewal. A paper presented at the Annual Convention of the American Association of School Administrators. Dallas: 1975.
- Devaney, K. Surveying teachers' centres - from grassroots beginnings to the possibility of federal support. San Francisco: Teachers' Centres Exchange, Far West Laboratory, April, 1977.
- Devaney, K. What's a teachers' centre for? Educational Leadership. 1976, 33(6), 413-416.

- Devaney, K. & Thorn, L. Exploring teachers' centres. San Francisco: Far West Lab for Educational Research and Development, 1975. (ERIC Document Reproduction Service No. ED 107 601)
- Devaney, K. et al. Discussions of major issues related to teacher centres. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Devaney, K. (Ed.) Essays on teachers' centres. San Francisco: Far West Lab for Educational Research and Development, 1977. (ERIC Document Reproduction Service No. ED 150 111)
- DeVault, M.V. Teacher centres: An international concept. The Journal of Teacher Education, 1974, 25(1), 37-39.
- DeVault, M.V. Teacher centres in Japan, England and the United States. A series of case studies. Wisconsin: Wisconsin University, 1973. (ERIC Document Reproduction Service No. ED 093 856)
- Dhand, H. & Murphy, M.J. A case for teachers' centres. Education Canada. 1977, 17(3), 18-21.
- Dickson, G.W. et al. Planning a prototype teacher centre in Ohio (Final report). Toledo, Ohio: University of Toledo, 1972. (ERIC Document Reproduction Service No. ED 086 677)
- District of Columbia Teachers' College. Organizing centres for in-service education in individualizing instruction and learning. Washington, D.C.: Author, 1967. (ERIC Document Reproduction Service No. ED 027 236)
- DiTosti, E. Professional development centres: the Maryland approach. Baltimore: The Maryland State Department of Education, 1976.
- Doe, B. Centre wardens discuss their future role. Times Educational Supplement, September 14, 1973, 3042, p.9.
- Drumm, G.B. The centre for open education: A centre without walls. Educational Leadership. 1976, 33(6), 441-443.

- DuShane, J. In-service programs for teachers in northwest Ohio. Journal of Environmental Education. 1975, 5(3), 12-14.
- Eddy, W.P. How successful are the British teachers' centres? Educational Leadership. 1974, 31(6), 509-511.
- Edelfelt, R.A. & Darland, D.D. The fickle frenzy of federal funding. The Journal of Teacher Education, Spring, 1972, 23, 3-4.
- Ellis, M.L. & Groome, G.F. A study of teachers' perceived in-service training preferences in School District No. 35 (Langley) and School District No. 43 (Coquitlam). Unpublished Masters project, Vancouver: Simon Fraser University, 1975.
- Ellison, M. Junior workshop in Shropshire. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Enfield Teachers' Centre. What's on: In-service activities. Enfield, Middx: Author, 1978.
- Enfield Teachers' Centre. Newsletters: 1977-1978. Enfield, Middx: Author, 1977-78.
- Estle, M.S. & Christensen, C.R. Teacher centres and P.L. 94-142: A unique opportunity for cooperation and resource utilization. 1977. (ERIC Document Reproduction Service No. ED 142 536)
- Evans, A. Teachers, trainers and development centres. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Evans, P. In-service on the spot. Times Educational Supplement, May 14, 1976, 3108, p.19.
- Evans, R.L. & Kilgore, A. The Suracuse University teaching centre: A model for preservice/in-service development.
- The Federation of Women Teachers' Associations of Ontario. The role of the teacher: A report to the Committee to Study the Problems of Teachers Declared Surplus. Toronto: Author, 1974. Phi Delta Kappan, April, 1978, 59, 539-541.

- Feiman, S. Teacher Curriculum Work Centre: A descriptive study. Grand Forks: University of North Dakota, 1975. (ERIC Document Reproduction Service No. ED 127 276)
- Feiman, S. Evaluating teacher centres. School Review. 1977, 85(3), 395-441.
- Feiman, S. Teacher behaviour during "open hours" in an independent teacher centre. Chicago: University of Illinois, 1975. (ERIC Document Reproduction Service No. ED 104 817)
- Feiman, S. The teacher centre concept. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Fibkins, W. The whys and hows of teachers' centres. Phi Delta Kappan, 1974, 55(8), 567-569.
- Fullan, M. Conceptualizing problems of curriculum implementation. In W. Werner (Ed.), Curriculum Canada. Canadian Association for Curriculum Studies and the Centre for the Study of Curriculum and Instruction, 1979.
- Griqqs, A. Teacher centres: The British model. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Hapgood, M. Supporting the learning teacher: An overview of teacher centres in the United States and England. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Harris, M. Neutral ground. Mathematics Teaching, 1975, 22-23.
- Harris, S.A. The teacher centre in Illinois: A different way to grow. Madison, Wisconsin: Upper Midwestern Region Interstate Project, 1977. (ERIC Document Reproduction Service No. ED 143 625)
- Henry, C. The administration helps teachers make the difference. Journal of Reading. 1977, 20(6), 508-512.
- Henry, N.B. (Ed.) In-service education for teachers, supervisors and administrators. The fifty-sixth yearbook of the National Society for the Study of Education (Part 1). Chicago, Ill.: NSSE, 1957.

- Houghton, C. Where teachers help teachers. Teacher. 1975, 22(5), 55-57.
- Howey, K.R. Comprehensive renewal in the public schools: The context and potential of teacher centres. The Journal of Teacher Education, 1974, 25(1), 26-30.
- Howey, K.R. Putting in-service teacher education into perspective. The Journal of Teacher Education, 1976, 27(2), 101-105.
- Hubbard, D.N. & Salt, J. Teacher centres - Some suggestions for a strategy. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Hunt, D.E. Teacher centres as persons-in-relation. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Institute of Development of Educational Activities, Inc. In-service development at the local level: Implications of the teachers' centre. Dayton, Ohio: Author, 1975.
- Jeffries, G. Thoughts from the centre. Times Educational Supplement, March 1, 1974, 3066, p.2.
- Jennings, N. A media resource centre where teachers are the major asset. T.V. Ontario, Toronto: Ontario Educational Communications Authority, 1976.
- Joyce, B. In-service: New perspectives on an old term. In M. Wideen, D. Hopkins & I. Pye (Eds.), In-service: A means of progress in tough times. Vancouver: Simon Fraser University, 1979.
- Joyce, B.R. & Weil, M. Concepts of teacher centres. Washington, D.C.: Eric Clearinghouse on Teacher Education, 1973. (ERIC Document Reproduction Service No. ED 075 375)
- Julius, A. British teacher centres: Practical applications for America. Phi Delta Kappan, Nov. 1976, 250-253.
- Kahn, H. Save our teachers' centres. Times Educational Supplement. October 3, 1975. 3148. p.2.

- Kahn, H. Farewell to a decade. In Enfield Teachers' Centre, Newsletter No. 30. Enfield, Middx: Enfield Teachers' Centre, March, 1978. 14-21.
- Kaplan, L. Survival talk for educators - on teacher centres. The Journal of Teacher Education, 1974, 25(1), 49-51.
- Keep local centres for in-service training. Times Educational Supplement. October 20, 1972. 2995, p.9.
- Kemble, E. At last, teacher centres that are really for teachers. In Office of Education (DHEW) (Eds.), Teacher centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)
- Landsmann, L. Teachers' centres. Instructor, February, 1975, 84, 110-112.
- Leonard, A.J. Teacher centres: Where do they come from and why? Speech given before the National Conference of the American Educational Research Association. Chicago: 1974. (ERIC Document Reproduction Service No. ED 090 204)
- Levin, C. & Horwitz, R. The Teacher Centre, Inc. (New Haven, Connecticut): A case study. Educational Leadership. 1976, 33(6), 434-439.
- Lickona, T. & Hasch, P. Research on teachers' centres. Educational Leadership. 1976, 33(6), 450-455.
- Lortie, D.C. Schoolteacher. Chicago: University of Chicago Press, 1975.
- Lortie, D.C. The organizational niche of teacher centres: One observer's view. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Lovett, C. & Schmieder, A. The new teacher centre program. In Office of Education (DHEW) (Eds.), Teacher centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)

- Lynch, J. The legitimation of innovation: An English path to "Open Education". International Review of Education, 1975, 21(4), 447-464.
- Makurat, P. The development of a math teacher centre. Contemporary Education, 1975, 47(1), 35-38.
- Mallan, J.T. Teaching centres: utopia, eutopia, or kaktopia? Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1975. (ERIC Document Reproduction Service No. ED 087 779)
- Manitoba Teachers' Society. Teacher centres. Winnipeg: Author, 1976.
- Manitoba Teachers' Society. Teacher centres: A report. Winnipeg: Author, 1978.
- Marriott, M. Development of the little red schoolhouse. In Atlantic Institute of Education (Ed.), Lighthouse learning program. Halifax: Atlantic Institute, 1975.
- Marsh, D.D. An explication of issues surrounding teacher centres and educational renewal sites. Monmouth, Oregon: Oregon State System of Higher Education, 1971. (ERIC Document Reproduction Service No. 086 678)
- Marsh, D.D. Issues concerning teacher centres: Research and development -is there a role? Berkeley, Calif.: Pacific Training and Technical Assistance Corp., 1974. (ERIC Document Reproduction Service No. ED 093 834)
- Martin, P. A teachers' centre for nine rural towns. San Francisco: Teachers' Centre Exchange, Far West Laboratory, April, 1977.
- The Maryland State Department of Education. Towards a partnership in teacher education (in part). In M. Hapgood (Ed.), Supporting the learning teacher. New York: Arqathon Press, 1975.
- Matthews, G. A beginning of teachers' centres. In R.E. Thornbury, (Ed.), Teachers' centres. London: Darton, Longman & Todd, 1973.
- Meridian Municipal Separate School District. Teachers' centre handbook, Grades 7-12. Meridian, Mississippi: Author, 1977.

- Miles, M.B. Educational Innovation: the nature of the problem, in M. Miles (Ed.), Innovation in Education. New York: Teachers' College, Columbia University, 1964.
- Miles, M.B. The teacher centre: Educational change through teacher development. In E. Adams (Ed.), In-service education and the teachers' centres. Oxford, England: Pergamon Press, 1975a.
- Miles, M.B. Reflections and commentary on the Syracuse conference on the teacher centre. In E. Adams (Ed.), In-service education and the teachers' centres. Oxford, England: Pergamon Press, 1975b.
- Mulhern, Dr. J.D. An overview of teachers' centres in England and Wales. A paper presented at Teacher Centering: A National Symposium. Washington, D.C.: 1976. (ERIC Document Reproduction Service No. ED 127 320)
- Munson, L.L. Teaching centres: A step backwards. The Journal of Teacher Education, 1971, 22(4), 487-488.
- McComb, D. & Willsey, A. So you're interested in teaching centres? Today's Education. Apr/May 1978, 67, 68-69.
- McGeoch, D. & Quinn, P.J. Clinical experiences in a teacher education centre. The Journal of Teacher Education, 1975, 26(2), 176-179.
- McKeegan, H.F. Curriculum development and in-service education in British teachers' centres. A paper for presentation at the American Educational Research Association. New York, 1977.
- MacLaren, H. The Teacher Curriculum Work Centre, Chicago: A case study. Educational Leadership. 1976, 33(6), 444-446.
- McNerney, R.F. Assessing perceived needs for training preservice teachers, inservice teachers and other educational personnel in cooperative teaching centres. A paper presented at the annual meeting of the American Educational Research Association. New York: 1977. (ERIC Document Reproduction Service No. ED 135 779)
- McPherson, B. Large scale systems of in-service education. In M. Wideen, D. Hopkins & I. Pye (Eds.), In-service: A means of progress in tough times. Vancouver: Simon Fraser

- National Educational Association. Congress enacts NEA teacher centre bill. Today's Education, March 1977a, 66, 74-75.
- National Educational Association. Teacher centred professional development. Washington: Author, 1974. (ERIC Document Reproduction Service No. ED 097 311)
- National Educational Association. The NEA and teacher centres. In Office of Education (DHEW) (Eds.), Teacher centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977b. (ERIC Document Reproduction Service No. ED 150 113)
- Nelms, B.F. In serch of a model for in-service education: Time for a retreat. English Education, 1975, 6(3), 175-177.
- O'Brien, T.C. Diary of a teachers' centre. Mathematics Teaching, 1975, 72, 42-45.
- Nyquist, E.B. British teacher centres and New York's experience with competency-based teacher education. A paper presented before the National Commission on Performance-Based Education. (Washington, D.C.) 1975. (ERIC Document Reproduction Service No. ED 104 869)
- Nist, J.S. Aspects of in-service education in England. A paper presented at the Annual Meeting of the Association of Teacher Educators (57th, Atlanta, Georgia, 1977). (ERIC Document Reproduction Service No. ED 135 749)
- Office of Education (DHEW). Application for grants under the teacher centre program. Washington, D.C.: Author, 1978a.
- Office of Education (DHEW). Teacher centre program: Grant requirements. Washington, D.C.: Federal Register, January 11, 1978b. 43(7): 1762-1783.
- Office of Education (DHEW) (Eds.). Teacher centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)
- Oliver, H.P.H. & Wees, W.R. The teachers' centre: A place to grow. Orbit, December, 1973, 4, 3-5.

- Osaba, E.C. A treatise on the diffusion of a specific educational innovation: teacher centres. Calgary: University of Alberta, 1978.
- Ontario Teachers' Federation. The current state of teacher centre development in Ontario. Toronto: Author, 1976.
- Owen, J.G. Developing teacher centres. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Arqathon Press, 1975.
- Parker, J.C. In N.B. Henry (Ed.), In-service education for teachers, supervisors and administrators. The fifty-sixth yearbook of the National Society for the Study of Education (Part 1). Chicago, Ill.: NSSE, 1957.
- Parsons, T.W. Developing a teacher centre. Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1972. (ERIC Document Reproduction Service No. ED 086 673)
- Pilcher, P.S. Teacher centres: Can they work here? In M. Hapgood (Ed.), Supporting the learning teacher. New York: Arqathon Press, 1975.
- Poliakoff, L. Opening up the view. The Journal of Teacher Education, 1974, 25(1), 52-58.
- Poliakoff, L. Teacher centres: An outline of current information. The Journal of Teacher Education, 1972, 23(3),
- Pomeroy, E.C. American Association of Colleges for Teacher Education on teacher centres. In Office of Education (DHEW) (Eds.), Teacher centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)
- Raskin, B. Teachers helping teachers. In Atlantic Institute of Education (Ed.), Lighthouse learning program. Halifax, N.S.: Author, 1974.
- Rasmussen, D. A view from the shop. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Arqathon Press, 1975.

- Rasmussen, L. The Philadelphia teacher centre. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Richards, C. Teacher centres: A primary school view. In M. Hapgood (Ed.), Supporting the learning teacher. New York: Argathon Press, 1975.
- Richards, F. Mathematics inside a multi-purpose teachers' centre. Mathematics Teaching. 1972, 25-27.
- Roberts, I.F. Chemistry teachers' centres. Education in Chemistry, 1975, 12(3), 76-77.
- Rogers, V.R. Teachers' centres in the USA: An idea whose time has come? Educational Leadership, 1976a, 33(6), 403-405.
- Rogers, V.R. Why teachers' centres in the US? Educational Leadership, 1976b, 33(6), 406-412.
- Rosner, B. The British teacher centre: A report on its development, current operations, effects and applicability to teacher education in the U.S. New York: City University, 1972. (ERIC Document Reproduction Service No. ED 090 165)
- Ruchkin, J. Teacher centres: How does one school-college collaboration work? The Journal of Teacher Education, 1974, 25(2), 170-174.
- Rust, V.D. Teachers' centres in England. Elementary School Journal. January, 1973. 73, 182-192.
- San Jose, C. Doing, talking, writing. English Education, 1975, 6(3), 150-153.
- San Jose, C. Staffing a teachers' centre - A joint venture in growth and exchange. San Francisco: Teachers' Centre Exchange, Far West Laboratory, 1978.
- San Jose, C. et al. Sketches of six US teacher centres. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Sarason, S.B. The culture of school and the problem of change. Boston: Allyn & Bacon, Inc. 1971.

- Schmeider, A.A. & Yarger, S.J. Teacher-teaching centering in America. The Journal of Teacher Education, 1974, 25(1), 5-12.
- Schmieder, A.A. A partial history of the federal role in the development of teacher centres. In Office of Education (DHEW) (Eds.), Teacher centres: Commissioner's report on the education professions. Washington, D.C.: US Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)
- Schmieder, A.A. Ten Critical Issues in Educational Reform. Journal of Teacher Education, 1975, 26(1), 18-23.
- Seldon, D. Teacher centres: Who should pay and who should control? Paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois, April, 1974. (ERIC Document Reproduction Service No. ED 090 168)
- Self, D. Can the centres hold? Times Educational Supplement, August 5, 1977, 3242, pps.10-11.
- Shulman, L.S. An agenda for research. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.
- Sieber, S.D. Organizational influences on innovative roles, in T. L. Eidell & J.M. Kitchel (Eds.), Knowledge production and utilization in educational administration. Eugene, Oregon: University of Oregon Press, 1968.
- Silberman, A. A santa's workshop for teachers. American Education, December, 1971, 7, 3-8.
- Smith, E.B. Jr. Total professional development of teachers: the teachers' centre way. Childhood Education, 1974, 50(6), 330-332.
- Smith, E.D. The state of the states in teacher centering. The Journal of Teacher Education, 1974, 25(1), 22-25.
- Smith, W.L. A * by any other name. The Journal of Teacher Education, 1974, 25(1), 2
- Steinaker, N. Ten years hence: The curriculum development and usage centre.

Educational Leadership. 1976, 33(6), 447-449.

Steinmetz, A. & Segel, J. Evaluating the teacher centre pilots: the third annual report, 1974-1975. (Volume 1, Summary) Charlottesville: University of Virginia, 1975.

Stephens, J. Some current issues for teacher in-service education. In E. Adams (Ed.), In-service education and teachers' centres. Oxford, England: Pergamon Press, 1975.

Stevens, J. Rural centres. Times Educational Supplement, May 5, 1972, 2972, p.5. Stone, R. J. Running a maths teachers centre. Math Teaching, 1975, 72, 28-29.

Tanner, J.R. & Denemark, G.W. The focus of the teacher centre in an educational renewal site (draft). Washington, D.C.: US Office of Education, 1972. (ERIC Document Reproduction Service No. ED 086 675)

Teachers' Centres Exchange. Commonality and diversity in four teachers' centres - conversations at Chautaugua. San Francisco: Teachers' Centre Exchange, Far West Laboratory. April, 1978.

Thornbury, R. The British teacher centre. In S. Feiman (Ed.), Teacher centres: What place in education? Chicago: The University of Chicago Press, 1978.

Thornbury, R. Powerhouses of postboxes? Times Educational Supplement. June 1, 1973a, 3027, p.2.

Thornbury, R.E. (Ed.) Teachers' centres. London: Darton, Longman & Todd, 1973b.

Thornbury, R. Teachers' centres. New Society, June 27, 1974, 28, 761-763.

Trentham, L.L. Auburn's cooperatively governed teacher centre. The Journal of Teacher Education, 1977, 28(5), 16-18.

Twomey, Sister M. One school system's approach to professional and program development, 1973/74. Orbit, October, 1974, 24(5), 3-4.

- United Kingdom Department of Education and Science. Teacher education and training. Report by a committee of inquiry under the chairmanship of Lord James of Rusholme. London: Her Majesty's Stationary Office, 1972.
- Up on centres, down on quality. Times Educational Supplement, September 26, 1975, 3147, p.15.
- Van Fleet, A.A. Teacher centres in Florida: A case study. School Review, 1977, 85(3), 412-424.
- Wagstaff, L. & McCollough, T. In-service education: Education's disaster area. Administrator's Notebook, 1973, 21(8).
- Wideen, M, Hopkins, D. & Pye, I. (Eds.), In-service: A means of progress in tough times. Vancouver: Simon Fraser University, 1979
- Witkowsky, J. & Cronin, J.M. Teacher centres: Sources of support. Illinois: Illinois Office of Education, 1979.
- Wright, E. A strategic policy for teacher centres. Secondary Education, March, 1974, 4, v-viii.
- Yarger, S.J. A tool for the analysis of teacher centres in American education -- A working paper. Syracuse, New York: Syracuse University, 1973. (ERIC Document Reproduction Service No. ED 086 676)
- Yarger, S.J. The future -- Do teacher centres have one? Paper presented at the annual meeting of the American Educational Research Association. Chicago: 1974. (ERIC Document Reproduction Service No. 090 219)
- Yarger, S.J. In-service education and teacher centres. In Office of Education (DHEW) (Eds.). Teacher centres: Commissioners' report on the education professions. Washington, D.C.:U.S. Government Printing Office, 1977. (ERIC Document Reproduction Service No. ED 150 113)

Yarger, S.J. & Schmieder, A.A. A promising approach to staff development. Today's Education, April/May 1978, 67, 70-71.

Yarger, S.J. et al. A descriptive study of the teacher centre movement in American education. Washington, D.C.: ERIC Clearinghouse on Teacher Education. 1975. (ERIC Document Reproduction Service No. ED 098 159)

Yeatts, E.H. Staff development: A teacher-centred in-service design. Educational Leadership. 1976, 33(6), 417-421.

Zigarmi, P.; Betz, L.; & Jensen, D. Teachers' preferences and perceptions of in-service education. Educational Leadership. 1977, 34(4), 545-551.