Children and Youth at Risk

Symposium Report
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INTRODUCTION

A Brief History

Two key objectives of the Pan-Canadian Education Research Agenda (PCERA) are to bring the interprovincial/territorial research issues that are important to ministers of education and training to the attention of the research community in Canada, and to promote open discussion on these issues with different partners in education.

The Canadian Education Statistics Council (CESC), a partnership between Statistics Canada and the Council of Ministers of Education, Canada (CMEC), initiated the PCERA with a view to promoting research leading to the development of new indicators and explaining the causal relationships underlying the indicators. As well, the PCERA was designed to promote research on existing and emerging policy issues that are of concern to researchers, policy makers, and practitioners across Canada. The current research priorities of the PCERA were defined through a process of consultation with the ministries and departments of education and training as well as through the work of an advisory committee of educational researchers and government officials.

PCERA Symposia

In 1999, the CESC organized the first PCERA symposium, which had the objective of addressing the seven priority areas. The symposium was held at Statistics Canada's Simon Goldberg Conference Centre in Ottawa and attracted over eighty participants.

This year’s topic, Children and Youth at Risk, was chosen by committee and provided opportunities for expanding our understanding of the at-risk concept, sharing current research findings, forging partnerships between the various stakeholders, and promoting new research in this topic area. Financial support for this year’s symposium was provided by Human Resources Development Canada (HRDC).

Report on the Children and Youth at Risk Symposium

This report documents the proceedings of the symposium and includes summaries of presentations, discussions, and commissioned research papers. An analysis of themes and issues as well as policy issues is provided in the section entitled “Children and Youth at Risk: A Synthesis,” written by Dr. Robert Crocker of Memorial University.

Commissioned research papers and the proceedings of PCERA symposia are available on the CMEC Web site at www.cmec.ca under Research and Statistics.
Highlights: PCERA Symposium on Children and Youth at Risk

- Ten research papers were commissioned from experts throughout Canada on various aspects of children and youth at risk. These papers provided the basis of the symposium and were organized into three sessions.

- Over eighty participants from education stakeholder groups – department/ministry officials, policy makers, researchers, and practitioners – participated in the symposium, which was held at Statistics Canada’s Simon Goldberg Conference Centre in Ottawa.

- The symposium provided a forum for education stakeholders to share findings about children and youth at risk, and to forge partnerships for future research in this area.

- Mike Sheridan, Assistant Chief Statistician, and Paul Cappon, Director General, CMEC, welcomed the assembly to the CESC-sponsored symposium and spoke of the partnership between their respective organizations, Statistics Canada and CMEC. Special mention was made of the support provided by Human Resources Development Canada (HRDC).

- Keynote presentations by Benjamin Levin, Deputy Minister of Education and Training for Manitoba (Day 1), and Alan King, professor at Queen’s University (Day 2), opened the proceedings of the symposium.

- Special presentations by Hans Wagemaker of the International Association for the Evaluation of Educational Achievement (IEA) and Allen Zeesman of HRDC demonstrated the importance of large-scale longitudinal and comparative studies.

- Small group and plenary discussions followed presentations by commissioned authors and respondents. Table books were used to record the outcomes of small group discussions. Monty Doyle facilitated the plenary discussion sessions.

- The panel session provided an opportunity for representatives from the major stakeholder groups – researchers, policy makers, and practitioners – to offer views on bridging the gaps between research and policy.

- Benjamin Levin closed the proceedings with a brief summary of the key issues raised during the two-day symposium.
How Can Research Contribute to Policy for Children at Risk?

Keynote presentation (day 1) by Benjamin Levin

Dr. Levin started his presentation with a comparison of the worlds of research and policy. In the world of social science research, he pointed to findings that are often indefinite and less than profound, and that do not necessarily reflect a consensus among researchers. Moreover, he noted, the dissemination and implementation of research results are not priorities for researchers. In the world of education policy, research is peripheral because of the stronger influences of the opposition, the media, and perceptions and beliefs of the public.

Dr. Levin used the at-risk policy issue as an example of bringing together the two worlds. He stated that at-risk research is a special case as its features (listed below) are of interest to governments in Canada and to researchers in various disciplines.

- Interdisciplinary nature – research relevant to the issue of at-risk populations is being carried out by the health and justice sectors, among other disciplines
- Challenge to conventional wisdom on deficits of children/youth and their families – recent research in this field has been drawing attention to the impacts of social, economic, and institutional contexts
- Effective use of the media – prominent researcher on at-risk issues, Fraser Mustard, has been successful in using the media to disseminate findings
- Use of linking vehicles – organizations such as the Canadian Institute for Advanced Research (CIAR), with the mission of connecting policy and practice, are prominent in this area

To conclude, Dr. Levin put forward the following factors necessary for strengthening the relationship between research and policy:

- Infrastructure – the existence of pan-Canadian databases, such as the National Longitudinal Survey on Children and Youth (NLSCY) and the School Leavers Survey
- Research support – the provision of funding for the analysis of existing data sets
- Research networks – essential linking vehicles that build and sustain research capacity and partnerships between researchers and policy makers
- Dissemination – vehicles that create links among policy and research communities, practitioners, and the media
Secondary School Students at Risk: Ontario and European Reforms

Keynote presentation (day 2) by Alan King

Alan King’s presentation focussed on structural factors that affect students and put them at risk of not completing school, in addition to other serious health problems. His findings were drawn from previous work carried out in cooperation with the World Health Organization (WHO) and a series of studies related to the health behaviour of children in school.

One of the key points during his presentation revolved around the structure of education systems worldwide. He touched on several elements of the various systems: keeping students together year after year, holding large numbers of students back, implementing curriculum, and sorting (i.e., an early versus late sort of students within the education system). Dr. King, however, emphasized the latter two elements and their effects on students’ transition from secondary school to work or postsecondary education and on their health.

Preliminary findings gathered from a recent study, entitled the double cohort study, showed how unfamiliarity with the new curriculum on the part of Ontario teachers led to the assignment of lower marks. Dr. King posited that this in turn may result in reduced opportunities for Ontario students when competing for access to postsecondary education in relation to students from other jurisdictions.

Dr. King showed how the overall educational structure of countries – be they soft or rigid systems – directly affects the students’ health and pathways to postsecondary opportunities. Students from countries with soft structures – where sorting and postsecondary decision-making is delayed, such as in Canada, the United States, and England, tend to exhibit higher levels of anxiety – especially among females – due to the uncertainty and pressure that results from a system that does not provide a great deal of direction. Moreover, Dr. King infers that a soft structure encourages students to stay in the university/college-bound stream “perhaps too long and too late to recover and take vocational training” as well as producing a large number of students in their 20s in school compared to other countries. A soft structure system also requires recovery opportunities for its students as demonstrated by numerous upgrading and second chance programs offered throughout Canada.

To conclude his presentation, Dr. King reviewed statistics on youth in Ontario who exhibited the following signs of alienation:

- A substantial number skip school and smoke.
- Ninety per cent of smokers use marijuana, and many try harder forms of drugs.
- They often do not feel part of the school, and they create their own cultures.
HRDC Research on Children

Presentation by Allen Zeesman

Allen Zeesman shared findings from the National Longitudinal Survey on Children and Youth (NLSCY) and the Understanding the Early Years survey (UEY). Key findings during his presentation are set out below:

- In 1997, 1.2 million children in Canada between the ages of 0 and 11 (27.6%) were vulnerable as they showed at least one learning or behavioural problem.
- A greater proportion of vulnerable children possess behavioural rather than learning problems.
- Only 2.9% of vulnerable children have both learning and behavioural problems.
- A greater prevalence of behavioural problems exists among boys.
- Vulnerability is not a permanent state for most children.
- Parenting style was found to be the most important protective factor for preventing vulnerability and for supporting “exit from an episode of vulnerability.”

In the latter part of his presentation, Mr. Zeesman focussed on the UEY – an enhanced version of the NLSCY – which encompasses a comprehensive national monitoring system for a larger series of outcomes and community-level measuring and reporting. He emphasized the influence of community on children’s outcomes and provided findings from the Community Mapping Study in combination with the Early Development Instrument (EDI). The EDI is an easy-to-administer measure, which provides school level data and important information about the outcomes of students from different communities. The EDI, which is being administered in more schools in its next round, could provide the basis for community comparisons throughout the country.

Mr. Allen Zeesman is currently the Director of Income Security and Social Development Studies in the Applied Research Branch, Human Resources Development Canada. His current responsibilities include policy research in the areas of child development, such as the National Longitudinal Survey on Children and Youth (NLSCY), exclusion and poverty, disability, and social indicators.

Mr. Zeesman serves in an advisory capacity on several forums including the Advisory Committee for the Canadian Institute of Advanced Research, the Advisory Committee of the Family Network of the Canadian Policy Research Network, and the Canadian Council of Social Development Advisory Committee for Progress of Canada’s Children.

Prior to working at ARB, Mr. Zeesman had worked for the federal government since 1982 in various social policy areas, notably child and family benefits, pensions, and federal-provincial transfers.

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IEA Studies and Youth at Risk

*Presentation by Hans Wagemaker*

Dr. Wagemaker started his presentation with an introduction to his organization, the International Association for the Evaluation of Educational Achievement (IEA). The IEA encompasses over 56 member countries, including Canada. The IEA uses the resources and expertise of Statistics Canada to provide sampling for some of its assessments and surveys.

The focus of the IEA is on large-scale assessment of student achievement, including studies such as TIMSS-R, PIRLS, CIVICS, and SITES (M2). Dr. Wagemaker offered ways in which assessments could advance the investigation of at-risk populations, including national-level project design and input, a range of sampling strategies (e.g., options to pursue oversampling of target populations), and analysis beyond mean scores. Dr. Wagemaker expanded upon the features of comparative studies such as regular monitoring over time, systemic analysis, focus on education issues capable of remediation, and the provision of ancillary information on socio-economic variables implicated in students’ learning.

“If custom and law define what is educationally allowable within a nation, the educational systems beyond one’s national boundaries suggest what is educationally possible.” Foshay et al., 1962
The Contemporary Concepts of At-Risk Children: Theoretical Models and Preventive Approaches in the Early Years

Authors: Marcel Trudel and Guadalupe Puentes-Neuman

The first section of the paper and Dr. Puentes-Neuman’s presentation highlighted several of the meanings that exist for the concept of “at risk” in the existing literature. According to the authors’ analysis, the definition of risk generally encompasses possible negative outcomes for the child due to prenatal or post-natal problems, developmental delays, and exposure to marital conflicts and adverse living conditions. Such variables susceptible to prediction of maladjustment “may indicate that they are causally related to the development of adaptation problems.” Other definitions of risk noted by the authors include the higher probability of having negative developmental outcomes, difficulties in social adaptations, academic success, and mental health.

The authors also point to the issue of risk versus vulnerability. Vulnerability, according to the author, is viewed by many researchers as “a set of characteristics or circumstances, which predispose an individual to manifest problems in adaptation.” Other researchers differentiate risk factors from vulnerability by associating risk with environmental influences and associating vulnerability with the child.

In her presentation, Dr. Puentes-Neuman noted that some researchers discuss risk factors as part of the social environment or socioeconomic condition of the family or even as characteristics of the family itself or as characteristics of the child. Such characteristics predispose the child to a negative outcome, which in turn becomes a risk in itself.

Other concepts noted in the presentation and the paper include protective and resilience factors as the counterpart of risk factors and how they mitigate the effects of risk factors and whether they may be inherent in the individual or present in the environment. More specifically, protective factors are “associated with a low risk for the manifestation of maladjusted behavior.” As well, the literature suggests that protective factors may allow an individual to “cope with risk factors or stressful events.”

The subsequent section of the paper focusses on resilience. This term is used to describe children who succeed and have positive outcomes despite adversity. Again, there is controversy in the research as to the definition of the term; thus it is not clear whether resilience is inherent to the child or a balance between the risk and protective factors. The authors criticize the literature for its lack of theoretical grounding and suggest when we speak of resilience factors, we need to put all of these concepts within the context of a developmental model. This will assist in understanding the pathways that children follow in arriving at a negative developmental outcome. Dr. Puentes-Neuman suggested, in her presentation, that it is not until we understand the underlying fundamental developmental processes that we will be able to understand the ways children deviate from normal development.
The author concludes by noting the need for a better understanding of developmental processes, both normal and deviant, as intervention strategies should be rooted in the developmental process. Complexity of developmental processes warrants multifaceted intervention design – which requires a multidisciplinary approach and an increased partnership among practitioners.

Respondents: Maryse Paquin and Marie Drolet

The response by Drs. Maryse Paquin and Marie Drolet primarily summarized commentary regarding research trends on children and youth at risk of developing problems with health and social adjustments. Dr. Paquin cited internal and external factors such as degree of vulnerability and family and environmental contexts that may predispose children to risk. Subsequently Dr. Paquin commented on the paper’s framework, which incorporated both old and new research models: the cause and the effect of risk, protective, and resiliency factors, and the use of multi-causal relationships with a view to identifying developmental paths of the child. She also highlighted findings that have achieved broad consensus in the scientific community: the factors associated with risk; the variability of the effects of risk; the categories and variability associated with protective factors; and factors fostering resilience. Early prevention with young boys is another point of consensus, she added, as research results are generally in agreement on the fact that young boys are more predisposed to risk than girls at the same age, faced with the same environmental stresses. Dr. Paquin emphasized the importance of early interventions and prevention programs in an effort to mitigate health and adjustment problems in the individual’s later years and in their future children as well.

The respondents highlighted what they considered to be one of the paper’s greatest strengths: the identification of how risk, protective, and resiliency factors interact in relation to the child’s characteristics and to environment factors. They also called attention to the need for more global and interdisciplinary approaches on future work in this area and the importance of establishing partnerships between researchers and practitioners. The respondents also noted the importance of family empowerment in addressing this issue through increased roles in the child’s schooling and with social or community services (associated with the child).
Dr. Schonert-Reichl began her paper and her presentation by demonstrating the ambiguity and vagueness that exist in defining the at-risk concept. More specifically, the author focused on the disciplines of education and psychology, and addressed the varying definitions of risk that exist among them. According to the author, the fact that this term is used in several disciplines adds to the difficulty in defining the term.

The author states that the factors, indicators, and dimensions around the idea of risk have broadened over the years. She points out that traditionally risk was seen as essentially being located with the individual or the family. More recently, however, prevalent themes of a more diverse nature are beginning to emerge within the “at-risk” literature. During her presentation, the author reaffirmed the following as the emergent themes: risk status should be viewed as a step along a continuum; risk factors are multidimensional and interactive; the at-risk label assumes prediction; risk is “multiplicative”; the nature and timing of risk factors may differentially affect outcomes; and risk propensity is heightened during periods of transition.

The author asserts that identifying risk as multilevel and systemic is crucial in terms of designing and implementing successful intervention strategies. She points out that intervention strategies that target a single risk factor are limited in their approach and thus may be unsuccessful. Thus, she states the importance of designing complex and comprehensive interventions that take into consideration multiple contexts of functioning.

Dr. Schonert-Reichl also described in both her presentation and her paper the role that schools play in the facilitation and reduction of risk and its implications for intervention and policy. As mentioned previously, the author pointed out that research initially concentrated on individual and familial factors in terms of assessing risk and thus, not surprisingly, she found limited literature on the role that the school context plays in influencing risk.

Dr. Schonert-Reichl noted that it has been suggested that “school context provides another critical, but often overlooked, sphere of influence on risk.” Therefore, she addresses the need for further research in this area.

In addition to research on the role of schools, the author identified the importance of including the perceptions of children and youth and their views and experiences in future research. She pointed out the necessity of including children’s voices in designing and implementing intervention strategies.

The author concluded by emphasizing the need for a shift in focus from risk to resiliency as a priority area for future research. She stated that the “key to prevention and intervention efforts is the identification of factors that lead to success rather than to just those factors that reduce risk.”
In her paper and her presentation, the author notes that the different meanings and interpretations of the concept of “at-risk” and the inconsistencies in applying these meanings hinder the facilitation and implementation of prevention and intervention strategies. Dr. Schonert-Reichl stresses the importance of having an operational definition of “at risk.”

**Respondent: Carol McLean**

Ms. McLean agreed with the author’s finding that the at-risk concept is vague, obscure, and overused – a finding in common with the Premier's Task Force on Children at Risk, which was established as a result of the shootings in a school in Taber, Alberta. The author also reported inconsistent use of the at-risk label, since some researchers use it as a predictor while others use it to indicate undesirable outcomes. Ms. McLean noted that the delineation of these two distinct usages would aid in establishing a clearer understanding of the term. The negative effect of labelling, also identified by the Task Force, was raised by Ms. McLean, and she agreed with the author’s suggestion that we shift our paradigm from a focus on risk to a focus on resiliency. Ms. McLean, however, was faced with a dilemma after reading the paper: should we or should we not label? However, she emphasized the need to come to an accepted definition of the term to bring clarity to the research and to facilitate the development of policies.

Ms. McLean commented on the author’s astute observation that risk factors are multidisciplinary, “multiplicative,” interactive, multi-level, and systemic. She also noted how these observations are valuable in supporting the coordination of services for children. She agreed with the author’s comments about the role of schools in the development of resiliency in children.

Overall, Ms. McLean found the paper to be a useful review of the literature, but felt a considered definition of the at-risk term should have been included.
Summary of Discussions and Table Books: Session 1

The main opinion expressed in both discussions and table books was the lack of consensus and clarity in defining “at risk.” As well, there was agreement on the need to focus on positive discourse around this issue: resiliency, adaptability, and building strengths and competencies in students. There was also debate on the importance of defining the term as well as on labelling students. Many arguments were made in favour of more universal responses in meeting the needs of all students.

An array of suggestions on policy research and/or actions was offered. The most popular were the following:

- how to increase coordination among the various sectors – education, justice, health and social services – since single solutions result in futile policy
- how schools contribute to creating at-risk students
- how to communicate policy information and research with the press and the public
- role of schools and institutions in addressing the issue of at risk: are there limits to government intervention in this area?
- identifying different cultural definitions of at risk linked to policy
- addressing the need to look at the impact of inventions
- examining the need for more research on the multi-dimensional nature of at risk
- implementing additional longitudinal research studies with larger sample sizes

Quotes from table books

There seems to be more consensus on risk factors than on the definition of “at risk.”

School concern is with individual students, not risk factors – which tend to be larger social policy questions.

Targeted programs do not necessarily produce the best outcomes.

The school system is a contributing factor to the at-risk phenomenon.
What Have We Learned Documenting and Evaluating School-Linked Services for Children and Youth at Risk?

Author: Richard Volpe

The central issues of Dr. Volpe’s paper and presentation focussed on best practices of school-linked services and the reasons why school-linked services have been difficult to implement.

The author noted in his paper and presentation that the concept of integrated services can be traced back to the 1800s when disease prevention strategies were implemented within the curriculum of the school systems. These strategies serve to illustrate the “school-linked efforts to ameliorate and prevent educational, health, and social problems, furthermore indicating that the notion of bonding services to schools is not a recent phenomenon.”

In addition, the author noted that reviewing the literature on school-linked services revealed the difficulty encountered in implementing change within the education system. In his presentation Dr. Volpe offered the following explanations for this difficulty: “press of the classroom,” culture of the school, and governance and financing of education.

Contradictions around issues such as the appropriate level of intervention (local, provincial/territorial, or national), the appropriate aspect of integration efforts, and whether “integration services is a means or an end in educational and human services reform” have led to controversy around the “role of schools in the integration of community services.”

The author further asserted the benefits of service integration by noting that it is a suitable means of advancing efficiency and availability of resources to “help children and their families.”

The next section of the paper focussed on pivotal findings from the OECD study. The OECD project specifically examined children who were at risk of not making a full contribution to society by not completing school and who were unable to make a successful transition to work and to adult life, which, according to the study, accounts for 15 to 30 per cent of children among member countries. The literary studies cited by the author all provide possible strategies to assist in breaking down obstacles and allow for successful “productive collaboration between schools and children’s service providers.”

Significant findings reported by the author included the statement that “integrated services were generally the preferred delivery mode at all levels of service.” Other findings from the study included the fact that models of school-linked services have a child-centred focus; there are three distinct processes by which linking between schools, health, and social services can occur; multiple changes, both regressive and progressive, were found to have occurred within the programs implemented. These changes were linked to funding and governance changes and the lack of guidance at the managerial level. The author viewed leadership as having an important role in service integration programs.
The author concluded by noting the current shift toward viewing a child in the context of positive achievements rather than negative features. The author also stressed the need for teachers to review the role that they provide in pre-service and in-service programs. The final lesson the author provided and noted as being key is the need to value human relationships, since intense interventions require it. As well, he stressed the need for the community to integrate and work as a whole. “Finally, change efforts need to be part of everyday life (within the community) if their benefits are to be sustained and fully realized.”

Respondent: Mary Smart

Ms. Smart commented on how the author achieved his goal of deriving “lessons that can prove useful in planning and implementing more mature policies and practice.” She noted the value of this paper, in particular for policy makers in the fields of education, health, and social sciences, through its integration of jurisdictional, national, and international research and its substantiation of findings and lessons learned. Overall, the paper was deemed to be well organized, instructive, and well argued.
The Costs of Dropping Out of High School

Presenter: Yves Gingras*

High School Dropout Rates in Canada

Labour Force Survey data reveal that dropout rates decreased throughout the 1990s in Canada. In 1999, the dropout rate stood at 15.1 per cent for 18- to 19-year-olds and 11.9 per cent for 20- to 24-year-olds. Leaving school temporarily is more frequent in Canada than in other OECD countries and results in a higher high school completion rate among 20- to 24-year-olds than among younger cohorts. This is largely due to the fact that Canada offers a “second chance” system where people can return to school to complete their diplomas. For the purposes of this report, the dropout rate is defined as the number of individuals whose highest level of education is less than high school and who are not students (either full-time or part-time) as a share in the number of individuals in a particular age group.

Characteristics of Dropouts

Findings from the 1991 School Leavers Survey (SLS) show that dropouts were predominantly male – two out of every three dropouts were young men – and they were more likely to be living with a single parent or no parent at all. The parents’ level of education, socioeconomic status, and their attitudes toward education also had an impact on the likelihood of their children completing high school. While in school, dropouts typically had had lower grades and were less likely to be satisfied with school or engage in school life. Aboriginal youth, those with disabilities, and those working excessive hours while in school were more likely to drop out than other students.

According to the OECD, mean literacy scores in Canada for individuals without a high school diploma were significantly lower than scores attained by graduates. This could suggest that the costs of dropping out, at least with respect to literacy skills development, are an important consideration.

Costs and Benefits of Education

The overall social costs and benefits of investment in education, including private and social market (monetary) factors and non-market factors, were calculated. Research from the Applied Research Branch of HRDC revealed that private rates of return were substantial when comparing estimated lifetime earnings of graduates to non-graduates: 41 and 54 per cent for young male and female graduates, respectively. If non-market benefits such as better health were considered, the private rates of return would be even higher.

The total market rates of return to society take into account both the public and private monetary costs and benefits associated with high school completion. The total market returns were smaller than private returns owing to the large cost of education assumed by governments. Nonetheless, the total market rates of return are substantial. For example, the rate is 17 per cent when assessing male and female graduates relative to those who dropped out at grade 10.
Respondent: Robert Crocker

Dr. Crocker commended the comprehensive and detailed work of Mr. Gingras and his colleagues in addressing the complex and significant issue of high school dropouts in Canada. Dr. Crocker emphasized the paper’s vast scope in addressing the various aspects of dropping out such as the characteristics of early school leavers, the comparison of labour market outcomes, analysis of private and social costs of dropping out, and in offering policy implications. The remainder of the commentary revolved around these points:

Dropout rates
◆ The need to keep in mind the differences in defining the term “dropouts” when calculating rates.

Labour market outcomes
◆ In comparing high school graduates to non-high school graduates, the authors highlighted the relatively small gap between these two groups as compared to the gaps between high school dropouts and those going on to postsecondary education.

Characteristics of high school dropouts
◆ In addition to identifying characteristics of school leavers, comprehensive modelling is needed to sort and identify differences and severity levels among these characteristics.

Private and social costs of dropping out
◆ Calculating the average cost of high school education as the basis of social costs underestimated the additional costs of producing graduates who do not follow the traditional pathways to graduation.

Policy Options
◆ Since numerous factors may be contributing to the decrease in the dropout rate, additional studies are needed to measure the “consequences” of current interventions such as the multimillion dollar Stay in School federal program.
◆ More attention needs to be paid to those students with special needs as they are most likely to drop out of school.
◆ There is evidence that the popular routes in addressing students with special needs, such as alternative/multiple pathways and streaming, are in fact working against the students they aim to help.
The Resilient Child: Theoretical Perspectives and Review of the Literature

Author: Bernard Terrisse

The at-risk child is defined by the author as a “child whose personal characteristics or environmental characteristics” indicate “at a very early age, a strong probability of psychopathologic development.”

Therefore, in the second section of the paper, the author focussed on intervention strategies for vulnerable children. Vulnerability is defined as “the predisposition of a child to develop learning and coping difficulties as he/she grows up.” The author pointed out that intervention strategies have been found to be more effective in the long term if the child’s environment (family, social, and educational) is considered along with characteristics of the child. However, not all children who are exposed to an unfavorable environment experience difficulties socially or academically. It is this concept of “resilience” and the “factors that could explain this invulnerability” that the author addressed in his paper.

The third section of the paper summarized resilience and its construct. According to the comments made by the author at the symposium, the resiliency theory came about as researchers found that some individuals were able to succeed despite adverse conditions. As in his paper, he stated that resilience is an old concept initially used in the field of physics and then biology and is only a fairly recent concept in the social science realm. The concept has evolved as individuals use strategies to cope with difficulties of the environment (home, school, institutional, and societal). Therefore, the author deduced that resiliency is not an absolute state but one of changes and adaptations. Resilience, therefore, is a multidimensional construct and is relative. An individual not exposed to adverse conditions cannot develop resiliency.

The fourth section of the paper focussed on risk factors and protection factors. Risk factors were defined by the author, both in his paper and in his presentation, as factors that, if present, increase the likelihood of difficulties in adapting compared to a child of the same age from the mainstream population. Protection factors are characteristics of the child or environment that may counter or limit the effects of risk factors when a child is placed in a challenging environment. The author deduces that interactions between risk and protection factors occur over time and involve not just individual and family characteristics but also schools, institutions, and the societal environment. In addition, during his presentation the author emphasized that risk or vulnerabilities do not reside solely with the child but with these various other factors. As well, he showed that both risk and protective factors have a cumulative effect. The author also added that most of the research is looking at the characteristics of the individuals and their family and less at the schools and even less at the institutional and societal level. Risk and protection factors at these higher levels are less apparent and often accessible only by inference and become observable only when translated into policies. At these higher levels research is more empirical, and it is difficult to operationalize theories.
The author concluded his presentation and his paper by asserting that resiliency studies are very complex owing to the multiple interactions between the various environmental factors. Furthermore, resilience is a multidisciplinary field of research involving psychology, psychiatry, neurology, and genetics at the individual and family levels; education science in the school/childcare environment; and sociology, anthropology, philosophy, economics, and political sciences addressing the institutional and societal levels. Therefore, multidisciplinary longitudinal studies with large sample sizes are needed in order to establish preventive intervention strategies.

Respondent: François Larose

The first part of Dr. Larose’s commentary provided a detailed summary of the three main sections of Terrisse’s paper: (1) the origin and theoretical premise of early intervention in marginal socio-economic environments, (2) the brief history of the construct of resilience, and (3) the qualification of three models of resiliency. The conclusion of Dr. Larose’s commentary consisted of the following three questions:

1. Could the author illustrate for us, in a concrete way, how a study of resilience in school-aged children from identical socioeconomic environments could result in a plan for prevention or intervention that differs from the present measures, with regard to extending accessibility to kindergarten for 4-year-olds in relation to the measures currently in place in Quebec?

2. Could the author illustrate in what way a risk prevention approach relating to childhood social and academic maladjustment, integrating an ecosystem-based perspective and based on his conception of resilience, can work in connection with the logic of educational reform, including preschool, that is centred on skill development, as seems to be the case currently in various places (Quebec, Belgium, Switzerland, etc.)?

3. Could the author state his opinion, based upon his position in relation to the epistemological foundations of the study of resilience, on the specifications that should be met by SSHRC-funded research in the area of risk prevention and social and academic adjustment?

To conclude, Dr. Larose emphasized the relative nature of the resilience construct and the importance that should be given to the epistemological approach of researchers working in this field. Moreover, resilience considered within a behaviourist perspective should entail interventions within a “social perspective.” On the other hand, resilience considered within a constructivist approach should focus on the at-risk populations, taking into consideration their own qualities and rules of conduct.

Dr. François Larose is a professor in the Faculty of Education at the University of Sherbrooke. He is currently directing or co-directing research programs funded by SSHRC, CQRS, and FCAR that focus on three main areas: school resilience, particularly cross-cultural perspectives; social representation of poverty and at-risk populations and their impact on pre-school/primary teacher education; and information communication technologies in teacher training.
Summary of Discussions and Table Books: Session 2

Commentary around the Volpe paper focused on the need for consideration of budgetary implications, interdisciplinary cooperation, strong leadership, community involvement, and long-term commitments. As well, several participants put forth the notion of full-service schools where professionals from various disciplines—child care, health, and social services—would work side by side with teachers. Integrative and interdisciplinary training—even hybrid workers—were suggested. Faculties of education were proposed as key to long-term development in this area. Turf wars, union issues, and unfamiliarity among the professional groups were some of the constraints addressed. The dissemination of best practices was also suggested.

Points raised on the paper by Gingras et al. examined the costs of educating students, noting that it was less expensive to provide assistance early in the process than to provide second-chance programming. As well, it was observed that the investments in education systems prevent future costs in the area of justice and corrections, another reason to emphasize this area. There was agreement on the value of completing a high school diploma since it provides the link to post-secondary education.

The concept of resiliency was deemed to still be in the development stages. No clear agreement on its origins was reached as some participants consider risk a necessary antecedent to resiliency. Terrisse’s paper, nonetheless, was considered a thorough piece of research.

Issues common to all of the papers included how to evaluate intervention programs, how to measure success, and the need to focus on populations and probabilities rather than on individuals.
Risky Business? “At-Risk” Designations and Culturally Diverse Schooling

Authors: Terry Wotherspoon and Bernard Schissel

The authors began their paper by providing background on public education, public policy, and the at-risk concept and its designations. One of the paramount points made by the authors in this section is how education systems in Canada consist of contradictory dimensions, such as conformity and competition as well as diversity and inclusiveness. The authors reaffirmed this in their presentation and also noted that “concern for the at-risk population is continually shaped by distinct ideological and political choices.”

Another key point highlighted by the authors was the interest of the school systems in dealing with at-risk children in a manner that would decrease the “disruptions” that these “learners posed to mainstream education.” The at-risk child is defined as “at-risk for not completing high school and facing personal developmental problems as a consequence of individual concerns, family status, or difficulties, and/or peer, school, and community factors.” As well in their paper and presentation, the authors noted that visible minority children, children who come from lower socioeconomic families, and children for whom English is a second language account for a majority of the at-risk population.

The authors proposed the need to use caution when identifying and labelling children as being at risk. This is due in part to the stigma such actions may create and also to the fact that not all individuals belonging to a designated at-risk population will face difficulties. The authors also noted that it is not the factors that are associated with at-risk individuals that induce risk but rather the environment in which the individuals are placed. The authors implied that the school system is one of these risk-inducing environments.

The manner in which public policy has been structured is another risk-inducing factor. The authors noted that the failure of intervention strategies is due to their format, which is based on the notion of correcting a “flawed client” rather than “the flawed nature of the society and the discourse of social services which becomes part of a discourse to stigmatize the oppressed.” All of the examples of intervention strategies provided by the authors were based on the notion of creating normalcy.

The authors also stressed in both their paper and their presentation that risk factors can be “layered and overlapping,” such that intervention must be early and take place within the family and community prior to the child entering school. Furthermore, researchers are beginning to stress the need for integrated intervention approaches, which would bring together the child’s family, school, and community.

The authors also noted the increased awareness in the literature around the notion of resilience. Shifting from a focus of risk to resilience, according to the authors, provides for “an understanding of what schools can do to support...”
positive development.” It is also imperative to realize the “multiple competencies that students may bring with them or develop through schooling and other life experiences.”

The central point of the concluding section of the authors’ presentation and paper illustrated examples of alternative schools, which have proven to be successful with at-risk students. This was possible, according to the authors, through “concerted efforts to demonstrate positive leadership, school climates characterized by equality and stability, and variety in instruction and management practiced by skilled teachers.” Other unique factors of these schooling environments are that they are integrated and community-based, and that the transitions from childhood to adolescence and from adolescence to adulthood are viewed as priorities. A theme, which these schools all have in common, is that they are working toward “diminishing at-risk designations by providing the students a context in which they feel valuable and in which the public sees students as productive and influential.”

Respondent: Kathleen Campbell

Ms. Campbell highlighted the key points brought forward by the Wotherspoon/Schissel paper:

- The authors argued that escapism, or treating the symptoms of escapism, is not the answer whether that escapism was found through self-administered drugs, such as alcohol or glue fumes, or through society-endorsed drug therapies such as Ritalin.
- The authors noted that sharing of best practices is good, but that the borrowing of analytic analogies from other disciplines is not the answer – that in the treatment of the “outliers,” the children at risk, there are serious flaws in the paradigms offered by medicine or by sciences such as biology.
- The authors also highlighted the risk of “decontextualizing the child” by basing intervention on the “flawed nature of the client” rather than giving recognition to the “flawed nature of society.”

Ms. Campbell considered the latter point the most critical. Subsequently, she posed the following questions. Are children at risk because they do not conform or because they have difficulty attaining established societal standards? Are children at risk because society does not recognize the standards and values of minority populations? Can a common goal for education be found without crossing the line of cultural assimilation? Ms. Campbell noted the difficulty in finding a solution from a cultural standpoint as many students come from different and sometimes unrecognized cultures.

To conclude, Ms. Campbell provided the following questions in response to the paper:

- The paper suggested that a solution to making schools more supportive would be to ensure that students themselves had a profound impact on the
constitution of the school. Is this not a short-term solution? Are not the
students themselves proxies for the expression of their societal norms —
norms that, in the long run, could best be expressed by their elders?

◆ Are schools to be considered a “community for children” – or are they a
reflection of their community? Should more thought be given to what the
nature of that community is and how it can be reflected in the school?

◆ Where, in the discussion regarding “best practices” for schools with Aboriginal
populations, are the references to Aboriginal scholars who have been
considering these issues?

◆ To whom are we looking for a response to meet the challenge of “children at
risk”? Are we looking only to the school itself to take on this challenge, or are
we looking to the society within which the school is situated?
This paper addressed the need for alternative education systems and programs for “at-risk” African-Canadian, visible minority, and First Nations children and youth. The authors began their paper and Dr. D’Oyley began his presentation at the symposium by mentioning the report composed by the Black Learners Advisory Committee (BLAC), which encompasses strategies and programs to assist in altering the lamentable educational state of black students in Nova Scotia.

In response to this report, the African-Canadian Services Division (ACSD) was instituted within the Ministry of Education of Nova Scotia. The ACSD and Council on African-Canadian Education (CACE) jointly advise the minister on the programs and services to implement within public schools to promote the rights and interest of African-Canadians. In addition to the ACSD, the authors made note of the establishment of peer tutoring in 1991 in response to recommendations made by BLAC. In a peer tutoring setting, “teachers, parents as supervisors, and peers as teachers work together to support the pupils to achieve the desired outcome of improved learning.”

The authors provided a detailed look into the Westview schools operating in the Greater Toronto area. The Urban Alliance on Race Relations (UARR) was created with the purpose of “bring[ing] together community and self-help groups from visible minorities.” In addition, the UARR also assisted with the placing of visible minority children in educational institutions. The authors also made reference, in their paper and in Dr. D’Oyley’s presentation, to the Westview Cooperative Project by the Dean of Education at York University. One of the pivotal objectives of this project was to increase the success of students in the Westview Family. However, the authors noted that despite the immense efforts made to ameliorate the conditions in the Westview schools, the fact remains that the percentage of black students in these schools continues to be minimal. The authors concluded this section both in the paper and in Dr. D’Oyley’s presentation by providing recommendations to increase the percentage and performance of black students within this community.

The authors concluded their presentation and paper by providing two case studies of alternative schools for First Nations children and youth: the Shxweterilthet - Sto:lo First Nations “Shelter” and Alternative Place to Learn and the Niji Mahkwa school. The former operates in Chilliwack, British Columbia, and the latter in Winnipeg, Manitoba. Common themes among these alternative schools and programs that contribute to their success include the utilization of diverse teaching methods, modification of curriculum to meet each student’s needs, and provision of a cultural aspect to education. The authors further imply that the Shxweterilthet program is a prime example of resiliency, “for despite numerous difficulties they are...
never defeated.” The dedication of the staff also far exceeds that of the norm. The Niji Mahkwa school, as well, has attributes that make it unique. For example, some of the schooling is conducted in Cree and Ojibway, the school offers a breakfast program, and the principal, “a sweat carrier,” offers the students the opportunity to travel with him to the “sweat lodge.”

By providing various examples of alternative schools, teaching strategies, and school programs, the authors have established the effectiveness of such approaches in reaching “at-risk” students.

Respondent: Brad Barton

Mr. Barton complimented the paper by D’Oyley et al. for highlighting many initiatives and educational enterprises for under-represented groups throughout Canada. The paper’s focus was on the struggle and challenges of African-Canadians and the detailed outcomes of the Black Learners Advisory Committee Report – a report that, in the opinion of the authors, set the stage for African-Canadians to become more involved in the education of their children. In addition, the authors noted structures and alternative programming that have been put in place to meet the needs of First Nations and Aboriginal populations. D’Oyley and his colleagues identified various community groups that took it upon themselves to provide more valuable and effective education programs for their children and youth.

Mr. Barton communicated to the assembly that research in the area of at-risk children and youth needs to involve minority groups. Furthermore, he stated that minority groups need to benefit from the result of any research carried out in Canada on this topic.
Summary of Discussions and Table Books: Mid-Session 3

Commentary on the papers by D’Oyly et al. and Wotherspoon and Schissel revolved around two main issues. First, many participants cautioned against the use of labelling. They noted that in many cases labelling can result in the marginalizing and stigmatizing of certain groups, especially in the case of minority groups. Once again, it was emphasized that risk is not a characteristic of an individual but is an assessment of a relationship between individuals and groups within a social, economic, cultural, and community context.

The second major theme raised during this session was that of alternative schools and their value in addressing the needs of at-risk children and youth. Characteristics such as greater cohesion and respect among individuals, greater democracy, stronger school culture, and smaller classes were highlighted and their applicability to schools in general was questioned. How do we help schools develop these characteristics? was a question asked during the session. Community programs were also deemed valuable in responding to the needs of students.

Participants also expressed the importance of incorporating different groups in the definition of policies in the area of children and youth at risk.

Quotes from table books

Students labelled “at risk” are only at risk of not being successful by someone else’s definition of success.

A child at risk cannot be defined out of context, that is, in relation to the standards of a given society at a given point in time.

We need to incorporate what we have learned about alternative schools into the larger [school] system.
Student Loans: Is It Getting Harder? 
Borrowing, Burdens, and Repayment 

Author: Ross Finnie

Dr. Finnie began his paper and his presentation by noting that since its commencement in 1964, the Canadian Student Loan Program (CSLP) has aided millions of Canadians in meeting career goals and taking their education to a higher level. The author also noted that although recognized for its positive aspects, the CSLP has been subject to criticisms for other aspects. The criticisms noted in his presentation and his paper are that “default rates are too high,” that it is easier for some students to get support while not enough is provided to others, that there is lack of flexibility in repayment arrangements, and, when compared provincially, “the benefits of the programs vary.”

More recently, according to the author, the pivotal concerns are that postsecondary students are borrowing more and repaying debts at a slower rate and that more students are defaulting. As a consequence, it has become paramount to look into the effect that these issues have on students opting to go on to postsecondary schooling or continuing on to graduate school. There is particular concern that individuals from lower socioeconomic backgrounds are more affected by these issues.

Dr. Finnie addressed these concerns and criticisms by conducting a statistical analysis using the National Graduates Survey databases. Specifically, an analysis of variables associated with the levels of borrowing from student loan programs, the burden of student loans, the proportion of graduates’ loans repaid, and the difficulties encountered in repaying student loans were of interest. The data analyzed consisted of information gathered by interviewing graduates from Canadian colleges and universities in 1982, 1986, 1990, and 1995. Two interviews were conducted, the first interview two years after graduation and the second, five years after graduation. The key findings mentioned in his presentation and paper were increased levels of borrowing and increased debt-to-earnings ratios. In addition, for each cohort the amount of loan repaid had decreased and 10 to 15 per cent of all graduates were found to have loan repayment difficulties.

In his presentation, the author made reference to recent initiatives taken by the CSLP to assist those individuals having difficulties repaying. These include interest rate reduction and debt reduction, where under specific circumstances an individual’s debt load may be forgiven. The author concluded by providing suggestions for future research into the effects of the student loan system on students’ decisions to “continue with their studies once started, their choices with respect to field of study, the time taken to completion, and the related issue of work during school.” As well, research into the effects of the system on students’ families and other third parties would be beneficial. The author also suggests exploring post-graduation outcomes such as “employment opportunities, career satisfaction, consumption patterns, and life styles in general.”
Respondent: Laurie Plager

Ms. Plager complimented Dr. Finnie's paper on its comprehensive trend analysis of research on borrowing and repayment patterns of postsecondary graduates derived from four recent cohorts of the National Graduates Survey (NGS). She also raised questions regarding the indeterminate risk implication of the Canada Student Loans Program (CSLP): does the impact of student debt loads for those who borrow to access higher learning programs outweigh the risk of not pursuing further education? The findings of the paper suggest students are borrowing more to attend post-secondary education, and Ms. Plager posited that these higher debt loads may cause some personal setbacks.

Next, Ms. Plager addressed the shortcomings of the NGS, specifically the exclusion of non-completers and students attending private vocational institutions. She referred to evidence from CSLP administrative data files demonstrating increased degrees of difficulty in loan repayment for those not included in the NGS. She communicated the following statistics:

- Almost half of the students who borrowed to attend private vocational institutions experienced difficulty in loan repayment one year after leaving school.
- Overall, one in three students finishing in 1995-96 experienced difficulties in repayment – an increase from one in five for those finishing their studies in 1990-91.

To conclude, Ms. Plager addressed the need for easy access to school program and labour market information to assist students in making informed decisions about postsecondary programs and institutions. She also emphasized the need for an exhaustive data set of student loan information regarding borrowing and repayment for all loans and borrowers. She noted that the harmonization initiative, undertaken by the federal and provincial governments, and the upcoming Youth in Transition Survey are initiatives that will aid in achieving this goal.
The Adolescent Mother: A Developmental or Social Concept?

Authors: Nadine Gallant and Bernard Terrisse

The authors began by noting that the concept of the “adolescent mother” encompasses a multitude of factors and indicators, which include the rates of fertility (birth rates) and pregnancy. They added that when national statistics are reviewed, a lack of a standard definition of the concept of adolescent mother makes it difficult to compare Canadian to American statistics.

For the purposes of their study, the authors defined the adolescent mother as “a young woman who became pregnant, gave birth to a child, and chose to raise the child before the age of eighteen.” The authors provide a comparative account of fertility rates among the Canadian provinces and territories. Quebec and Ontario have the lowest rates and the Northwest Territories has the highest rate, five times higher than the overall Canadian average. Finally, when compared to European countries and Japan, the Canadian rate of fertility is higher.

The second section of the paper provided a literature review on the psychological profile of the adolescent mother. It becomes evident that researchers are divided on the characteristics that are attributable to the at-risk adolescent mother. Common social/family characteristics identified in the literature and at the presentation include: a difficult childhood, an unstable or disintegrated family, low socio-economic background, conflict with intimates, social isolation, and physical and/or sexual abuse. Common psychological characteristics include low self-esteem and poor involvement in social life, school, and work.

In the third section of the paper, the authors summarized the unfavourable effects for both the mother and her child. For the adolescent mother, early maternity “leads to financial dependence, cessation of academic study or professional work, social isolation, a higher rate of divorce and separation, more children, and frequent pregnancies.” During the presentation, Ms. Gallant noted that the effects on the children include low birth weight, premature birth, less attachment, and more difficulties coping in school and socially.

Many researchers have also noted that teenage mothers face a double crisis. This implies that a teenage mother lives a paradox. As a teenager, she has yet to discover everything about adult life; however, she must also provide for the needs of a child dependent on her and for whom she is responsible. Opposing views exist within the research as to what accounts for the problems observed for the adolescent mother. Some believe the basis is the youth and personal characteristics of the adolescent, while others believe that the socioeconomic status and social class of the adolescent account for the problems. Others believe the cause is a combination of the two.

The subsequent section of the paper and the presentation addressed the two intervention strategies: 1) prevention, where the aim is to limit the number of pregnancies; 2) providing the adolescent mother with support in an effort to improve her living conditions and parenting skills. The authors noted that prevention strategies should include education about sex and contraception. The

Ms. Nadine Gallant is a lecturer and doctoral candidate in the Special Education Section, Department of Education Science, Université du Québec à Montréal, and a member of the Groupe de recherche en adaptation scolaire et sociale GREASS (School and Social Adaptation Research Group). Her doctoral thesis delves into the effects of a parenting training and parental support program on the attitudes and images reflected in teenage mothers’ parental educational practices. Her M.A. thesis dealt with the related theme of teenage mothers’ social support networks, educational attitudes and practices, feelings of educational competence, and parental stress. She is also a consultant to “l’Envol,” a Montreal-area community organization serving young families at risk, especially teenage mothers, in the development of a parenting education and parental support program.

See page 16 for Dr. Terrisse’s biography.
authors pointed out that the concept of the adolescent mother is not rare, and that in some cultures a young woman is considered mature at the age of 15 or 16 and quite capable of having children. Taking these activities into account, the authors suggest that the concept of the adolescent mother is a social and cultural one; that longitudinal studies of the socioeconomic status of the adolescent, her personal characteristics, and her environment will allow for an evaluation of the long-term effects of early maternity on both the child and the mother. These studies, therefore, can lead to the identification of the areas in which intervention strategies will be the most effective.
Students with Exceptional Learning Needs: At-Risk, Utmost

Author: Judy L. Lupart

Dr. Lupart began by providing an account of issues that render special needs children and children with disabilities “at risk.” She noted that individuals with disabilities and exceptional needs are less likely to succeed in school and participate fully in our society, thus limiting their employment opportunities. Conditions such as these exist, according to the author, due to the static framework on which our societal institutions are arranged and function, thus rendering them incapable of adapting to the specific needs of an individual.

Dr. Lupart’s paper and presentation focused on “gaps and limitations” in education for students with exceptional learning needs. The gaps identified by the author at the school level include:

1. teaching practices that have not been modified,
2. ambiguity around responsibility of regular classroom teachers for the “learning progress of students with exceptional learning needs”,
3. inadequately trained regular classroom teachers working with exceptional learning needs students,
4. lack of adequate support in lower pupil/teacher ratios and lack of assistants,
5. time constraints that limit the amount of consultation and collaboration with parents by regular classroom teachers,
6. vagueness of roles of regular and special education teachers,
7. inadequate knowledge of special education and/or inclusion among school administrators, and
8. policies and practices of schools that are organized around the ideology of the “average child.”

Gaps and limitations identified at the student level include the following:

1. students must be identified as having exceptional needs before receiving special programming and instruction,
2. students with special needs must successfully proceed through referral, testing, labelling, placement, and programming before receiving instruction that differs from that of the regular classroom,
3. the progression between stages is very slow,
4. an excessive portion of the funding is absorbed by identification and diagnostic testing,
5. inconsistencies in accommodations provided to students,
6. planning is poor for transitions between levels of schooling, and transition accommodations and procedures from school to workplace are limited, and
7. programming options for students with exceptional learning needs are often inappropriate.
In the next section of the paper, Dr. Lupart provided a literature review around the issues of diversity and disability, equality and excellence, and teachers. During her presentation, she reaffirmed her belief that these issues are significant in obtaining authentic inclusion. The author continued her presentation and her paper by addressing the paradox of attempting to achieve both equality and excellence in the education system. The author noted that although the achievement of these two objectives is the goal on two different levels, there is a need to realize that they both can be accomplished simultaneously. In order to fulfil the objective of obtaining both equality and excellence within the school system, the author posited the need for a unified school system, which operates based on “adhocracy.”

The subsequent section of the paper involved an examination of the dominant role that teachers play in the “learning of every child” and also in the operation of authentic inclusion. In order to minimize the gaps noted above, there is a need to reduce special education to one element, that of programming and promoting an inclusive classroom environment. In conclusion, the author reiterated the need for eliminating the paradoxes and inconsistencies that exist within our education system, by unifying the two currently existing systems of education and thus supporting authentic inclusion.
Respondent: Marie Pierce

In responding to the paper by Dr. Lupart, Ms. Pierce limited her comments to four key areas: the need for a community-based approach to inclusion; the importance of a continuum of services; the need to focus on implementation issues and get beyond the debate around the placement of individual students; and the need for caution and flexibility when undertaking changes. Many of her comments were based on a paper by the Canadian School Boards Associations, in partnership with the Canadian Association of School Administrators, entitled Toward Inclusion – Improving Education for Students with Special Needs, 1998.

Community-Based Approach
Ms. Pierce agreed with the author’s definition of inclusive schools as schools in which appropriate educational programs are geared to the capability and needs of all students, but added the need for inclusive schools to have the necessary support and assistance required for proper instruction. Furthermore, Ms. Pierce emphasized the need to broaden our focus of schools into the community to examine the services offered by other agencies and social supports, as schools are not the only institutions having an impact on the learning that takes place in a community.

Continuum of Services
Under this heading, Ms. Pierce put forward the importance of a continuum of options ranging from segregation to conditional and unconditional integration to inclusion, with the latter being the preferred end result. Achieving this goal, she continued, requires commitment, vision, financial resources, and the “means” to achieve these policy/program goals. She categorized these means into four broad categories: instruction, support services, physical environment, and social support.

Cautions
Under this heading, Ms. Pierce stressed that changes toward more inclusive schools should not be made within the context of negative rhetoric with regard to the existing service delivery system. Rather than focusing on deficiency of programs, she suggested building on their strengths instead.
Summary of Discussions and Table Books: Session 3 (Final)

The majority of the comments raised during this session revolved around the papers on special needs and teenage pregnancy.

Commentary surrounding the Lupart paper focused on her unified system model. Although there was general concurrence with her model, its implementation was not agreed upon. As pointed out by a participant, the removal of diagnosis and testing at the outset would undoubtedly lead to an enormous burden for teachers. In addition, reducing variation of special needs students in classrooms is needed in successfully carrying out a unified system. Funding and training were seen as key elements in reducing the gap between expectations and the “ability to deliver” services. Partnering with community and parent groups and among the various professional groups addressing special needs students was also deemed important. It was argued, as well, that resources for special education services in recent years have increased.

The following questions were raised vis-à-vis the Gallant/Terrisse paper on teenage pregnancy:

- Do we have evidence on the impacts of health and personal planning courses on teenage pregnancy?
- Are there studies on the roles and responsibilities of males on this issue?

It was also noted, during this session, that research drawn from our American counterparts with regard to teenage pregnancy may be misleading owing to the differences in our health care systems. As a result, the risk to the individual in Canada would be lower because of the quality of pre- and post-natal care.

The availability of a wider range of recreational activities for teens and the creation of intervention programs targeting the root causes of teenage pregnancy were suggested during this session.
Panelist: Alan King, professor and researcher at Queen’s University

Dr. King took this opportunity to further develop the theme of exclusion and reintegration of alienated students that was touched upon during his keynote presentation. Findings from his studies showed that, regardless of social class, at-risk students come from homes where they do not feel comfortable. Dr. King argued that schools were not serving the function of reintegrating these students as they are further alienating them by judging students and by not providing adequate programming in response to their needs. He posited that schools need to be more accepting by providing a full range of recovery programs – upgrading, retraining, alternate schooling – and by providing a community that students can be part of. He stated, however, that structural changes that need to take place must first occur in the home. The home, Dr. King continued, cannot keep pushing students out: the role of parents in addressing the at-risk issue is pivotal.

Panelist: Allen Zeesman, HRDC

Mr. Zeesman began his presentation by noting the limitations the education sector faces in addressing at-risk children and youth, as many solutions to this issue lie outside its realm. He offered the following solutions:

◆ Intervene as soon as possible. In many cases, dealing with school-aged children is already too late. There is a very strong case for investment in early childhood.
◆ The need exists for a universal basis for many of the target programs.
◆ Parenting is of prime importance.
◆ Greater integration is needed between schools and the community.
◆ Employment and income needs of families are key issues.

As well, Mr. Zeesman emphasized the importance of the “knowledge aspect” and provided the following points to elucidate:

◆ Future initiatives in all sectors will come from individuals and communities and less so from institutions such as schools, hospitals, and governments.
◆ Integrated services at all levels require greater information infrastructures in their creation and operation.
◆ Given the complex relationships that affect the trajectories of childhood development, best practices have yet to be established in this area.

To conclude, Mr. Zeesman proposed the following interventions:

◆ A series of planned and coordinated early intervention pilot programs, throughout Canada, with the main objective of reducing the variance of developmental outcomes among children as they enter schools.
◆ Universal preschool monitoring of developmental outcomes, on a population basis instead of a diagnostic of the child.
Improved access to childhood databases especially those children with families on social assistance.

The collection of holistic and development outcomes in schools so as to focus on how children are performing.

A significant increase in the knowledge support for parents.

Panelist: Normand Dubé, teacher from the Eastern Ontario School Board

Mr. Dubé opened his presentation with a short vignette depicting the realities of dealing with at-risk children and their parents. Afterwards, he postulated that he, too, was at risk – a teacher at risk. He also made the point that with many of his students “risk” no longer exists. Instead, with students at a more advanced stage in the education system, risk takes the form of real problems – problems teachers have to deal with in the classroom. Mr. Dubé supported interventions and research focussing on young children before they start exhibiting behavioural and learning difficulties.

Subsequently, Mr. Dubé emphasized the large gap that exists between the realities of teaching and research on education. He called attention to the need for making research more accessible to teachers. He urged all stakeholders to play their part, including governments, researchers, universities, school boards, school administrators, and teachers themselves.

To conclude, Mr. Dubé offered the following suggestions. First, he proposed that CMEC sponsor pan-Canadian research where researchers would work hand in hand with schools. Second, he proposed having ministries and departments of education allocate funds for the purpose of better informing teachers about the latest research.
Commentary from Symposium Participants

Maryse Paquin, professor at the University of Ottawa, responded to Mr. Dubé's idea of risk no longer existing among students at a certain stage. She disagreed with his view by stating that risk is always present as students' situations can progressively deteriorate beyond the display of problems to the unfortunate point of suicide. Dr. Paquin felt that teenage suicide is a key area of the “at-risk” topic that was missing at this symposium.

Paul Cappon, Director General of CMEC, responded to the suggestions put forth by Mr. Dubé. Dr. Cappon noted the differences in education programming in the jurisdictions throughout Canada. As well, he pointed to the undecided state of theories discussed at the symposium and cautioned against the universal dissemination of findings at this premature stage.

Nick Parker-Jarvis, President of the Canadian Association of Principals, called attention to the successes of schools in Canada: the improvement of retention and graduation rates and Canada's competitive scores on standardized testing. He especially noted how students, in general, have a positive attitude toward school. (This statement was also confirmed by Dr. King.) He also pointed to the challenges faced by schools, such as media attention on the ranking of schools (in British Columbia), the increased responsibility placed on teachers and their institutions, and the limited resources and training to accompany the added expectations on the school system.

Mary Smart, an Education Officer with Ontario's Ministry of Education, highlighted the need for greater participation by faculties of education in forums such as this symposium. Moreover, Mike Hayes, teacher from the Saanich School District, emphasized the need for greater participation by more senior-level provincial/territorial policy makers. Dr. Cappon responded to Mr. Hayes' suggestion by agreeing to place more emphasis on attracting additional senior-level policy makers. In addition, Dr. Cappon put forth the idea of having senior policy makers make presentations – with researchers as the respondents – at the next symposium. Symposium participants were very enthusiastic about this approach. Dr. Cappon also highlighted the nature of policy decisions in the education field, which are often not evidence-based but have a tendency to be based on beliefs and past practices.

Additional commentary from symposium participants identified the importance of obtaining information directly from those constituents involved (i.e., students, teachers, parents) and the need to pay more attention to the “resounding theme of boys” in the research as findings show they are more disposed to risk than girls.
**SYMPOSIUM WRAP-UP**

**Summary**

Risk is a characteristic of situations not individuals.

Schools are part of both the solution and the problem.

Schools cannot single-handedly solve all social problems.

Prevention is critical yet proves to be difficult to put in place.

Schools will not be the primary places where prevention takes place.

Ways of advancing the research agenda:

- creating sustained capacity building, linking mechanisms, and dissemination vehicles
- involving politicians and more senior policy makers
- keeping in mind the realities of practice in order for policy to truly affect change

**Wrap-up Commentary by Benjamin Levin**

Dr. Levin brought the proceedings to a close with a summary of key points raised during the symposium. In his opinion, the most important matter discussed during the two-day event was that risk is a characteristic of situations, not of individuals. Dr. Levin added that less effort should be given to predicting individuals’ outcomes as our abilities to do so are poor. Instead, we should focus on the situations that create risks – this will lead us to different directions in policy and practice.

Second, Dr. Levin identified how schools are part of both the solution and the problem. He nonetheless stated that schools cannot single-handedly solve all social problems and called attention to the need for a systems approach in addressing issues. In his words: “We are all caught in an ecology all of which needs to be considered at the same time.” Hence, the mandate of schools must consider not only the needs of children but also those of their families and communities.

Third, Dr. Levin commented on the difficulties in instituting prevention programs. He referred to past debates in health care where prevention was deemed critical, yet in the end funding was put towards treatment. An explanation provided by Dr. Levin was that prevention is not carried out in the same place as treatment. Similarly, he posited that schools will not be the primary places where prevention takes place. As a result, alternative mechanisms and service vehicles will have to be established; schools will contribute to these but not be at the centre of them.

To conclude, Dr. Levin offered ways of advancing the research agenda. He commended the symposium for providing opportunities for synergy to occur between the various stakeholders in education. However, he recommended sustained capacity building and more regular opportunities for exchange by putting in place the best features of the policy networks in Canada. He echoed recommendations offered during his keynote presentation by stressing the importance of dissemination and how it needs to be specifically addressed and not left as an afterthought.

Dr. Levin also suggested the importance of involving politicians and senior policy makers and the need to pay attention to the realities of practice. “If we have learned anything about change in education over the last 30 years it is that we can change whatever we want in the world of policy, but if it doesn’t fit with the culture/nature of the school and classroom, then it doesn’t happen.”
As mentioned in the Introduction, this symposium was the second in a series sponsored by the Council of Ministers of Education, Canada (CMEC) and the Canadian Education Statistics Council (CESC) as part of the Pan-Canadian Education Research Agenda (PCERA). The topic of this symposium was one of several addressed in a preliminary way at the previous PCERA Symposium held in February 1999. The 2000 symposium topic was selected by the PCERA Advisory Group and Task Group as a significant area for research and policy development. The symposium provided an opportunity to explore the research and policy issues surrounding education of children who, for whatever reason, are at risk of not meeting the normal expectations of the education system.

It is useful to remind ourselves of the fundamental concern that has driven CMEC and CESC to organize this symposium series. As stated in the introduction to the 1999 symposium, its purpose is “to promote dialogue and convergence among the different partners in education on the direction that research in [a number of priority areas] might take and to explore possibilities for realizing this agenda.” The 2000 Symposium Program restated the objectives of the PCERA “to bring the interprovincial/territorial research issues to the attention of the research community in Canada, and to promote open discussion on these issues with different partners in Canada.” We can infer from these statements that the specific goal of the 2000 symposium was to promote further research on children at risk, so as to inform policies designed to provide appropriate educational programming for such children.

This attempt at a synthesis will centre around three questions: “What do we know about children and youth at risk?” “What do we need to know?” and “What are the major policy issues surrounding this area that might be informed by research?” Because the papers presented were themselves intended to synthesize the research on specific issues within the field, these questions are therefore explored with direct reference to the papers presented and the symposium discussion - no attempt has been made to further review the literature, introduce topics not addressed in the symposium, or formulate specific policy recommendations.

The first question is addressed by identifying themes that cut across more than one paper and that seem to represent key issues. The question of what we need to know leads further into the keynote addresses and table discussions, and also introduces an element of critique, that is, identifying issues that appear not to have been adequately addressed. Finally, the problem of policy-making in the absence of adequate knowledge is explored, and an attempt is made to identify specific issues for a proposed research agenda.

What do we know about children and youth at risk?

The term “knowledge” as used here refers to both empirical generalizations and theoretical concepts. Empirical knowledge refers to the body of generalizations that may be derived from basic data about who is at risk, the factors associated with risk, differences in outcomes between those at risk and others, and the effects of attempts to reduce risk or to enhance outcomes. Research on such matters is not only typically based on underlying theoretical constructs, but also contributes to the elaboration of these constructs. As a simple example, we must accept some definition of risk before attempting to estimate the proportion of the population that is at risk. Differences in such figures are as likely to be the result of differing definitions as they are of inaccurate counting. It is important, therefore, to attend equally to underlying concepts and to empirical data. Together, the two give us some
picture of what is “rational to believe” at a particular time, recognizing that this may change as new data become available and as our conceptions about the issue are modified.

We must also recognize, of course, that policymaking and work in schools cannot come to a halt or be frozen in time pending better data or more comprehensive theory. At any given time, what we do to address the problem of children at risk is a matter of professional and political judgment based on some combination of research knowledge, conventional wisdom, advocacy, political ideology, legal requirements, and a variety of other influences, including pure guesswork. Current thinking in policy-making leans in the direction that we should attempt, as far as possible, to make evidence-based decisions. While this seems to point to an enhanced role for research and a diminished role for advocacy, conventional wisdom, or guesswork, it must be recognized that limitations of our research knowledge at any point will restrict its role in decision-making and that even the strongest research evidence is often not sufficient to override other factors that enter the picture.

Although the presented papers cited many basic facts about children and youth at risk, a major thrust of some of the papers was on theoretical constructs that help us understand the meaning of “at risk.” It is therefore appropriate to identify these constructs and give their meaning as presented. Subsequently, some questions are raised about the interpretation of these constructs and their potential for guiding both research and policy.

What do we mean by “at risk”?
Several of the papers addressed this issue, in different ways. Wotherspoon and Schissel, for example, took issue with the very notion of identifying individuals as at risk because the designation itself has the potential “to become the means by which resources are diverted away from constituencies that require them the most.” These authors went on to argue that “at-risk” designations may be particularly dangerous in an increasingly diverse society, where departures from some conventional concept of “normality” can lead to increasing numbers of individuals being declared at risk by virtue of their membership in particular family, language, ethnic, or racial groups. Schonert-Reichl took this further by making the point that the label “at-risk” has been applied to so many characteristics and circumstances that it has lost much of its meaning. Schonert-Reichl also argued that the “at risk” designation is essentially based on a medical/psychological deficit model, in which those at risk are assumed to possess some defect. Taken a step further, this model can lead to the view that those at risk are responsible for their own poor performance or that they perform poorly because of home and family circumstances and not because of any failings on the part of the school system.

Trudel and Puentes-Neuman distinguished between risk and vulnerability, noting that the latter is viewed by many researchers as “a set of characteristics or circumstances which predispose an individual to manifest problems in adaptation.” Nevertheless, this seems little different from the definition of “at risk” given in the Terrisse paper as “a child whose personal or environmental characteristics indicate, at a very early age, a strong probability of psychopathologic development.” Both conceptions emphasize that risk can have its origins in either personal or environmental circumstances or, by extension, in both of these in combination.

Several of the papers, as well as the discussion, expanded on the latter point by raising the question of whether “at risk” should be identified as an individual, a group, or a societal characteristic. This has important implications for intervention because it is possible to think of interventions targeted either at high-risk groups or at individuals who exhibit particular symptoms of risk. There is substantial evidence in the literature that members of particular racial or ethnic groups, those from low-income or single-parent families, or those who
have suffered stress or abuse have disproportionate numbers in various at-risk categories. On the other hand, the term “at risk” can equally be applied to children with particular mental or physical disabilities or specific learning or behavioural problems, independently of their family background or social class. Some of the authors made the point that such designations allow society to place the responsibility for being at risk on the individual, family, or group, rather than on society and its institutions. The essential argument here is that society itself creates risk by failing to provide appropriate support for individuals, families or communities or by making institutional arrangements that are inappropriate for some members of society.

Schonert-Reichl, in particular, argued that such a characterization of at risk “limits the utility of the label and thus narrows the effectiveness of prevention and intervention efforts.”

Who is at risk?
This question was addressed in at least two ways in the symposium. First, a number of papers cited figures on the proportion of children and youth considered to be at risk. Second, despite cautions in several of the papers against using a deficit model of risk and particularly against labelling particular groups as being at risk, a number of efforts were made to enumerate characteristics of individuals and groups that constitute indicators of risk.

On the first point, it seems to be a telling indication of our state of knowledge in the area that the papers acknowledged that there is no agreement on the proportion of individuals who might be classified as at risk. Volpe, citing OECD figures, reported that 15 to 30 per cent of children could be considered at risk. Schonert-Reichl cited both the recent Report of the Pan-Canadian Education Indicators Program (1999) and other studies to place the proportion at about 20 per cent. Lupart documented the substantial growth in the number of children in special education programs in Alberta, a phenomenon that is replicated in most jurisdictions. It is not clear, however, whether this is a function of real growth in the number of at-risk students, better identification, greater sensitivity to the needs of such students, or, as Lupart suggests, less tolerance of student diversity leading to more and more students being seen as departing from the norm.

Wotherspoon and Schissel cited US data as indicating that from one-quarter to one-half of all students are “educationally disadvantaged” and one-quarter to one-third are seen as “extremely vulnerable” to dropping out of school or experiencing other severe educational difficulties. These authors also argued that the widely cited US report A Nation at Risk could be interpreted as implying that the inferior education provided by the public school system in that country was placing all children at risk. Wotherspoon and Schissel refer to “an economic climate characterized by rising youth unemployment, fragmentation of family life, public policy emphasis on resources for an aging population as opposed to children and youth, and increasing inequalities in the general distribution of resources,” but also argue that a discourse that places all youth at risk undermines the strengths and capabilities that many youth do possess.

Finally, Gingras indicated that the dropout rate was around 15 per cent in 1999 in Canada (new estimates of this indicator were being developed at the time of the conference: contact the authors for recent results). Canada’s dropout rate is lower than the OECD average, but substantially higher than countries such as Korea, the United Kingdom, or France. Gingras also showed that the dropout rate has been decreasing in recent years, that many students find ways of completing high school after initially dropping out, and that Canada has been relatively successful in getting a large proportion of its students to complete secondary schooling.

Despite the thrust of many papers against identifying the “at-risk” designation with particular racial, ethnic, family, or socioeconomic groups, or even with particular individual disabilities, a substantial amount of research on at-risk students has to do
with determining the antecedents of being at risk. Almost invariably, these antecedents take the form of individual or group characteristics. There is perhaps a fine line between correlational relationships (for example, between socioeconomic status and educational outcomes) found through research and stereotypical statements that label the poor, for example, as engaging in behaviours that place their children at risk. While some of the papers decried such stereotyping, others were at pains in attempting to identify the correlates of risk. The discussion showed conflict in this area, particularly on whether it is more appropriate to focus on the individual found to be having difficulties or on groups exhibiting an abnormal rate of such difficulties. This is a crucial distinction for policy, as will be seen later, because one approach points mainly to intervention once a problem is manifest and the other approach points to possible attempts at implementing preventive measures.

Schonert-Reichl identified four major categories of risk factors as follows:

1. Individual factors (e.g., low IQ, poor social and problem-solving skills)
2. Family factors (e.g., low family cohesion, mentally ill parent, low SES)
3. Peer factors (e.g., rejection by peers, victimization)
4. School factors (e.g., low teacher support, school alienation)

Schonert-Reichl argued that an understanding of at risk requires attention to multiple contexts. Schonert-Reichl and others also made the point, typically citing the work of Michael Rutter, that risk factors are multiplicative and that exposure to multiple risk factors creates a “snowball” effect, which rapidly increases the probability of unfavourable outcomes. The implication is that risk can be seen as a continuum and that the probability of risk can range from low to high, depending on the combination of individual or environmental circumstances to which the child is exposed.

Terrisse elaborated this categorization by presenting an interesting two-way classification of the individual and environmental circumstances under which children develop. This may be depicted graphically as follows:

<table>
<thead>
<tr>
<th>Individual Environment</th>
<th>Without Deficiencies</th>
<th>With Deficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Unfavourable</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

What is important here is that, contrary to some other viewpoints presented, this categorization includes the possibility of individual deficits. At the same time, according to Terrisse, the majority of at-risk children fall into the third category, that is individuals without deficits who must function in unfavourable environments. Terrisse associates this category mainly with children from low socio-economic backgrounds. This, of course, further implies that unfavourable environments constitute a form of deficit and that, further, the unfavourability of the environment is linked to the home and family rather than to social institutions such as the school.

Elaborating on this basic model, Terrisse presented a long list of factors that researchers have linked to being at risk or, conversely, to protection from risk (depending on the direction or value of the variable at hand). Thus, for example, socioeconomic status can constitute either a risk or a protection factor. The implication is that a child without deficiencies can be at risk if in unfavourable socioeconomic circumstances while a child with some form of deficiency might be protected from risk by belonging to a favourable socioeconomic group. A further implication of the overall risk/protection model is that risk factors may be offset by protection factors. Indeed, an argument can be made that this is precisely the basis on which most interventions are designed. While we may not be able to do much about the existence of certain risk factors such as low SES,
these may be offset by activities that introduce protection factors into the life of the child.

Gallant and Terrisse developed the concept of characteristics of those at risk in some detail, with specific reference to adolescent mothers, a group that is clearly definable and generally regarded as having severely compromised academic and economic outcomes. This paper serves to point out some of the complex psychological and social factors that characterize this group and that contribute to pregnancy among teenage women. The important point is made that, despite clear evidence of the ill effects of teenage pregnancy for both mother and child, some adolescent mothers do not necessarily regard themselves as at risk and pregnancy is perceived as serving positive needs and desires. This illustrates a dilemma familiar to those who deal with those at risk, namely that risk may be defined by others rather than by the particular target individual or group. The paper presented evidence of differences in profile between those who carry their pregnancy to term and those who choose to end the pregnancy, indicating that the latter group tends to be of higher socioeconomic status, have higher academic and economic aspirations and generally have fewer family problems.

It might be noted that the discussion revealed no clear consensus on the value of labelling individuals as at risk or placing individuals into various categories for treatment, although this is common practice. Some models of service imply that if all individuals are treated in accordance with their specific needs, there would be no need for labelling. On the other hand, identifying an individual as having a specific type of disability, or some other need that is different from the majority, can be seen as a necessary precursor to prescribing an appropriate treatment for that individual.

At risk of what?

None of the conceptual papers addressed explicitly the types of undesirable behaviours or outcomes that individuals at risk might be expected to exhibit, other than by broad references to “maladaptation” or “psychopathology.” Nevertheless, it is fair to argue that the overall concern was with poor school outcomes of various sorts. The clearest statement was given by Volpe who, citing the OECD report *Our Children at Risk*, defined risk as being “in danger of failing school and/or of being unsuccessful in making the transition from school to work.” Volpe went on to state that “children and youth at risk are those prone to academic failure and diminished life opportunities due to poverty, racism, and other disabling conditions.”

A couple of papers were devoted explicitly to examining specific kinds of undesirable outcomes. Gingras, for example, focussed on dropping out of high school, while Gallant and Terrisse, as already described, addressed adolescent pregnancy. The latter paper suggests that a phenomenon such as teenage pregnancy can be regarded as an unfavourable outcome (of pregnancy prevention programs, for example) and as leading to further problems that, indeed, can become inter-generational in nature.

None of the papers explicitly addressed early manifestations of failure to adapt, such as delay in learning to read or inappropriate school behaviour (such as aggression or withdrawal), that are arguably the most obvious concerns within the school system. Furthermore, while some papers referred to the more extreme forms of maladaptive behaviour, such as violence or substance abuse, these tended to be treated as symptoms that would identify an individual as at risk of poor school outcomes rather than as consequences of other risk factors. Finally, the problem of where the line should be drawn between normal and maladaptive outcomes, and whether this line should be different for different individuals or groups, was
not examined, except incidentally in reference to societal diversity. While not a problem with individual papers, it is an obvious limitation of the paper set as a whole that these points were not explored more fully.

The resiliency construct

Despite the propensity to associate being at risk with specific individual or group characteristics, it is obvious that not all individuals possessing such characteristics exhibit maladaptive behaviours. (We shall return to the concept of “at risk” as a probabilistic statement later). This seems to have led to a further concept that is helpful in understanding risk, that of “resilience.” Although the concept of resilience was raised in several of the papers, the paper by Terrisse developed it in the most detail. Under an ecological conception of risk, as espoused by Terrisse, the ecosystem in which an individual is situated can generate both risk factors and factors, known as “protection factors,” that can limit the individual’s vulnerability. The interaction of these factors within the ecosystem can cause some individuals to encounter problems and others to become “resilient.”

Terrisse gave a long list of the factors, at both macro and micro levels, that can influence an individual’s susceptibility to problems. It is argued that adaptation is affected by an accumulation of these factors and their interactions. Other authors (Trudel and Puentes-Neuman and Schonert-Reichl) further elaborated this construct, noting in particular that as in the adaptation of any living organism, resiliency cannot develop without exposure to risk. The implication is that this construct is helpful in explaining the success of some individuals with exposure to risk factors, but not in explaining success for those without such exposure or the failure of others to become resilient on exposure to risk.

The concept of inclusion

Perhaps no issue has received so much attention in recent years as that of integrating individuals with exceptionalities into the mainstream of schooling. The concept of inclusion may be defined within schooling as that of treating children at risk in ways that are as similar as possible to how other children are treated. Some elaboration of this concept is a necessary precursor to any discussion of policy and programming. This section draws directly on the paper by Lupart for this elaboration.

Lupart described the history of the treatment of students with exceptional needs progressing from exclusion and isolation to increased inclusion. The origins of this progression were traced to the evolution of schools themselves from being reserved for children from privileged classes to becoming a vehicle for improvement of individuals and society. Thus, the evolution of mass education, in itself, can be seen as a major step toward inclusion. At the same time, early public schools had no place for individuals with disabilities, and special schools evolved for children with visible handicaps such as blindness. Somewhat later, special institutions emerged to accommodate children from various kinds of disadvantaged backgrounds. Obvious examples were the residential schools for Aboriginal children and custodial facilities for orphans and for those with severe mental, emotional, or physical disabilities.

Lupart traced the rise of special education services in schools to the 1950s and 1960s and attributed this mainly to the activities of parents and advocacy groups. During this time, provinces and territories moved from operating separate institutions for special needs students to inclusion of most such students in regular schools. Elaborate classification systems for exceptionalities emerged during this time based mainly on individual characteristics (such as low IQ, physical handicap, or maladaptive behaviour) rather than on family or social background. While Lupart argued that this form of special education perpetuated the segregation of
special needs students through their assignment to separate classes, inclusion in regular schools, along with the development of programs to treat specific forms of exceptionality, can also be seen as a form of progress toward inclusion.

The next stage of evolution toward inclusion, according to Lupart, may be traced to the civil rights movement and, more broadly, to increased “public commitment to the social welfare and normalization of individuals with disabilities.” The concept of “integration” found its practical application in the inclusion of students with exceptionalities in regular classrooms. This proved highly controversial, both because of the burdens placed on teachers and because of the more fundamental issue of whether it makes sense to return special education students to the very setting where they had failed in the first place. All of this evolved in the 1980s to the development of individualized education programs, which identified the program modifications and special services that each child would receive.

The final stage of development, which Lupart believes represents contemporary thinking, is identified as a “unified system of education in which all children could be provided with an appropriate education.” In effect, such a model dissolves the line between students with exceptionalities and “normal” students and functions as if all children have unique characteristics to which the educational environment should be adapted.

Lupart described the current state of this approach as one of confusion and misunderstanding. The concept of inclusion is being used as a reason to close out special education services, while this philosophy also leads to the identification of more and more students as requiring such services. At the same time, classroom teachers are becoming less tolerant of diversity in regular classes. Lupart finally presented a case for a restructuring of schools into a unified system of education and identified the obstacles to achieving such a goal.

The concept of integration of services
One further concept bears discussion as it relates to both the conceptualization of at risk and the matter of intervention. Just as inclusion has become the extant model for school services, “integration” or “coordination of services” has become the current way of thinking for those concerned with the full range of services needed by those with exceptionalities. Volpe, for example, argued that “schools alone cannot deal with the complex personal and family problems, high levels of violence, substance abuse, poverty, and alienation.” Volpe went on to argue that traditional social services appear to be overwhelmed and that services to children are “fragmented, overspecialized, and overburdened” and that “unintegrated services have been shown to be deficient in their ability to produce desired outcomes.”

Volpe traced the history of integration of services to the latter part of the nineteenth century, when schools came to be seen as a convenient location from which to dispense health services. This trend progressed during the early part of the twentieth century from concern with disease prevention to attention to mental health. Subsequent “third generation” efforts involved integrating other forms of social services, again with the school as the primary organizing unit. Volpe argued that most of these innovations have now disappeared, along with the naive notion that it is possible to bring about large-scale system change. Current programs, characterized by Volpe (citing others) as “new wave,” tend to be more targeted and community focussed. Volpe noted the complexity of such initiatives and the difficulty of implementing radical change in entrenched bureaucratic institutions. Volpe also noted that such initiatives have not yet been shown to yield the efficiencies and cost savings promised by their advocates.

The thrust toward integration of services can be seen as a logical extension of the calls for a unified approach to education as expressed by Lupart and others. In fact, the notion of individual educational
plans or programs, which has been prevalent through the past decade, now seems to be on the verge of being supplanted by a broader concept of “individual student service plans,” which encompass much more than what the school itself has to offer. In some jurisdictions, such plans require the participation of a wide variety of professionals and agencies, which, depending on the particular situation, may include social services and health, recreational, and justice agencies, as well as parents, teachers, and other school staff. All of this points to a general notion mentioned by several authors of the need for a holistic approach to child development and for communities becoming involved in the development of their children and youth. At the same time, this introduces further complexity into the diagnosis and treatment of individuals. Arguably, this may work against the very concept of inclusion because of the extraordinary level of effort required to address the problems of some children.

Programming examples
Although the symposium was not intended to present a compendium of programs for treating at-risk children and youth, some of the papers either made reference to specific programs in place or addressed in a general way the types of interventions that might be appropriate for particular individuals or groups or that might illustrate what is meant by inclusive environments or integrated services.

Based on a review of the OECD study and of studies conducted in several Canadian provinces, Volpe identified the conditions that seem to be required for successful school-linked approaches to service integration. These involve, first, having a clear image of the child at risk. Most exemplary programs were characterized by a holistic child-centred image, based on increasing the educability and improving the life chances of children. A second characteristic involves having an appropriate organizational approach to overcome the natural turf protection embodied in bureaucratic agencies. Neither top down nor bottom up approaches seem to work. Three successful organizational approaches, described as “ring,” “spoke,” or “spiral,” were identified. The first involves intense interaction among the agencies. In the second, one agency acts as a primary agency or “hub” while others act as “spokes,” becoming involved as needed. In a spiral organization, a single agency such as a school provides multiple services. A third characteristic of successful programs is identified by Volpe as “progressive change” often along multiple paths. No single type of innovation can be identified as more effective than others. Adaptation to the situation at hand, persistence, and sustained support are important requirements. Related to the latter, the importance of leadership, and in particular the link between leadership and funding, was stressed.

Several strategies that are directed to those at risk of dropping out of high school or who have already dropped out were discussed. The most obvious of these is modified programming. It was argued that—with early intervention, greater flexibility in instructional methods and approaches to match individual need, supplemental support in core skill areas such as reading and mathematics, and with parent and community support—most of those with learning difficulties would be able to graduate without diluting educational standards. The use of vocationally oriented programs or other programming initiatives such as co-operative education that link education to work were specifically noted. Considering that in Canada, it is not possible to complete high school by the legal school-leaving age, raising the school-leaving age was offered as a further possible initiative to keep students in school longer. Based on studies that link higher minimum wage to higher dropout rates, it was also suggested that lowering the minimum wage for those under 18 may also be an effective way to retain those attracted by the prospects of immediate work and income. Finally, because of the success of the federal government’s “Stay in School” initiative,
public awareness campaigns to encourage students to stay in school also had potential.

Again with reference to adolescent mothers, Gallant and Terrisse made the important point that both prevention and assistance strategies may be employed to reduce risk. Evidence was presented that sex education programs and other preventative measures can be taken in response to this problem but also that, once an adolescent becomes a mother, programs are required to reduce the risk of dropping out of school, health problems, poor child rearing practices, and other undesirable outcomes for both mother and child. This is a clear example of an area in which it would be appropriate to apply an integrated approach to services.

The most explicit attention to intervention strategies can be found in the paper by D'Oyley et al., which described a number of programs that have been developed to address the problems of at-risk African-Canadian and other minority children and youth. After identifying organizations that had emerged to serve the needs of black populations of Nova Scotia, the paper described peer tutoring programs as an initiative of one of these organizations (The Black Learners Advisory Committee), arguing that peers as tutors can often “influence the at-risk students more strongly than teachers were able to.” A second initiative is an annual one-week camp conducted at Acadia University, which focusses on mathematics, computing, African cultures, and anger management. This camp includes both “at risk” and other students, which allows for peer tutoring. Turning to initiatives in Ontario, the paper describes several programs targeted mainly at black children of West Indian origin and characterized by efforts outside the school setting, such as evening or Saturday classes designed to improve school performance. Finally, the paper described two “alternative schools” designed to serve First Nations students, specifically those at risk of dropping out of high school. The first is essentially an academic program operated with a more intensive level of teacher and other services than usually found in the public schools; the second is based more directly on Native language and culture.

What is most interesting about this paper is the essentially local nature of the programs described and their application to individuals within specific target groups. The first point again raises the important question of whether most interventions for at-risk children should be of this nature. Is it possible to generalize successful programs to individuals of all races? For example, referring back to Gingras’ paper, one might ask whether dropout-prevention programs need to be tailored to local circumstances or whether more global strategies such as modified programs or awareness campaigns can be effective. The second point takes us back to the issue of targeting individuals versus groups. The thrust of some of the discussion would be against targeting specific racial or ethnic groups, for example, as is done in the programs described by D’Oyley and his colleagues. D’Oyley argues that for at-risk racial minorities, the deficits are so large and past teaching efforts have failed for so long that some specific targeting with new strategies may be one of the effective ways to remediate.

Large-scale national and international studies

A substantial part of the symposium was devoted to presentations based on large-scale surveys, using national and international samples. While offering a somewhat disparate series of results, the presentations by King, Zeesman, Gingras, and Finnie, as well as Wagemaker’s presentation on the role of the International Association for the Evaluation of Educational Achievement (IEA) illustrate the place of such research in addressing issues of children and youth at risk.

The results on student aspirations presented by King are striking. Essentially, what the results show is that aspirations seem to follow the organization
of the system. Countries such as Canada and the United States, in which streaming decisions are delayed, tend to have large proportions of students aspiring to university. King tended to view this as unhealthy because of the risk of unrealized aspirations. King also argued that such a system places students under undue pressure. In contrast to this, the point was made on several occasions throughout the symposium that Canada has been particularly successful in having a large proportion of its youth participate in postsecondary education. The relatively successful transitions made by postsecondary graduates in Canada can be taken as evidence that high aspirations can have substantial payoff.

Zeeman’s presentation was based on the National Longitudinal Survey on Children and Youth (NLSCY), the most comprehensive series of surveys ever undertaken of this population in Canada. This paper illustrated clearly how large-scale research can contribute to the identification of factors associated with risk. More important, the paper addressed in a concrete way the concept of vulnerability and, in particular, how vulnerability appears to be a transitory phenomenon for many children. What is interesting about this, aside from the specific findings, is the promise of longitudinal studies and the ability of such studies to help elaborate theoretical concepts. It should equally be possible to use such studies to examine the effects of programs designed to reduce risk or, more generally, to determine the effectiveness of broad policy directions such as the integration of special needs children.

Gingras stressed the superiority of longitudinal surveys over cross-sectional ones. Although they are more resource intensive and take longer to produce results, longitudinal surveys such as the NLSCY and the Youth in Transition Survey (YITS) are sound public investments since there are solid, well-tested techniques that can be applied to longitudinal data. Both surveys will be central elements in determining appropriate policies to better support the development of youth in the future. In addition, Gingras showed how broader periodic surveys such as the Census and the Labour Force Survey, can also be brought to bear on issues surrounding risk. While the data derived from different sources sometimes seem to complicate matters by yielding different results, Gingras again showed how these differences can be traced to differences in definition and how it is important to be clear on the particular definition being used in making statements about phenomena such as dropping out.

Finally, although on a much narrower topic, Finnie’s paper is perhaps the best illustration of how large-scale research (in this case the National Graduates Survey) can be used to shed light on issues that occasionally become the subject of considerable controversy. Contrary to what might be inferred from media reports and political rhetoric about the student debt problem, Finnie’s data indicate clearly that this problem is experienced by a relatively small number of graduates and that most graduates either have no debt or have been able to pay off student loans relatively quickly. While the discussion presented some challenge to these results, particularly since private college graduates and those who fail to complete their programs are not covered by the NGS, data of the sort presented, used appropriately, can often place a realistic perspective on issues that occasionally become exaggerated and distorted by reports in the popular press.

**What do we need to know?**

Many of the limitations of our knowledge about at-risk children and youth were identified in the responses to presentations and in the table discussions that followed. In keeping with the perspective that knowledge entails theoretical constructs and what we may call “rational beliefs” as well as empirical generalizations, the discussion here is organized under the two headings: Status of Underlying Theoretical Concepts and Status of Our Empirical Knowledge, each of which cuts across the issues already identified from the papers.
1. Status of Underlying Theoretical Concepts

The main theoretical ideas addressed in the papers centred around problems in the definition of “at risk,” the characterization of risk as personal or environmental in origin, and the concepts of vulnerability and resiliency.

Definitions The table discussions of the papers addressing the definition of “at risk” reflected concern over the absence of a suitable definition. At one extreme, the concept can become all-encompassing, with everyone being seen as at risk in some way. On the other hand, it was argued that too narrow a definition, especially if based on specific labelling of conditions, can result in many children being missed or in focussing on special interests rather than on needs.

The distinction made in some of the papers – and reinforced in the discussion – between individual and environmental sources of risk suggests two fundamentally different approaches to defining risk. The first is based on manifest behaviour that is known to be associated with some undesirable outcome. A second approach defines risk as associated with possession of a particular set of background characteristics.

The first approach is akin to medical diagnosis and is essentially the approach traditionally used for assignment to “special education.” The process typically begins with parents or teachers noticing that the child is not progressing at a normal rate or is exhibiting other forms of maladaptive behaviour. After what is sometimes a protracted diagnostic effort, a decision is made on a treatment regime, which may be tailored to the individual or selected from a repertoire of standard treatments. Under this approach, family background, socioeconomic status, ethnicity, or similar factors do not enter the definition, or do so only incidentally as attempts are made to find the source of the problem. This avoids creating self-fulfilling prophesies, applying labels to particular groups or treating individuals differently based on their backgrounds. On the other hand, an argument can be made that this approach fails to identify potential problems before they begin and precludes taking preventive measures.

The second is essentially an epidemiological model. Here, all individuals with certain background characteristics are considered at least potentially at risk. This approach makes the most sense if the intention is to head off the risk by applying preventive measures to the group. This approach may be identified with “head start” or similar programs targeted at groups from particular family or socioeconomic backgrounds or at members of particular racial or ethnic groups.

The problem here, as illustrated by the discussion, is that the two approaches may be in conflict from a policy-making perspective because the first would encourage policies related mainly to diagnosis and treatment while the second would tend to point to policies leading to prevention. Advocates of both approaches can be found. However, in the absence of clear evidence on which approach yields the greatest payoff, there is a risk of resources being allocated in unproductive ways.

Risk as a probabilistic concept A point that seems to have been missed in most of the discussion is that, regardless of the definition, risk is essentially a probabilistic concept. It is not possible to predict outcomes on an individual basis. In the first or diagnostic model, a probability of an undesirable outcome is (at least implicitly) assigned to an individual based on the behaviour observed. Under the second model, the probability is assigned to a group, and all individuals in that group are assumed to possess that probability. In both cases, probabilities can be estimated by research on outcomes given particular behaviours or group characteristics.

This leads to the first major issue on the “need to know” agenda. That is, we need to find ways to make better estimates of the probability of undesirable outcomes. Several of the papers attempted to identify factors associated with risk, and others spoke of the concept that the probability of risk...
increases exponentially with exposure to multiple such factors. However, only the Gingras paper gave specific probabilities. That paper cited a Quebec report as showing that the probability of high school graduation for students with mild learning disabilities was 38 per cent, for those with behavioural difficulties it was 15 per cent, and for those with severe learning difficulties it was 13 per cent. All of these are in contrast with a probability of graduation of 83 per cent for those with no declared disability. (Here we simply give graduation rates in probability terms to illustrate the point).

While some might argue that this merely points to the self-fulfilling prophesy inherent in labelling students as having disabilities, it seems more likely that the figures point to the failure of whatever programs are in place for these students. The point is that it is possible, often in relatively simple ways, to assign probabilities to outcomes, based on the study of samples of individuals. Knowing such probabilities can be of substantial value for policy purposes as they point to areas in which intervention might be needed. Taking this a step further, the success of an intervention can be measured by changes in the probability of desired outcomes.

**Resiliency** Resiliency is a clear example of what might be called an “explanatory” construct. Nominal, the value of this construct lies simply in helping us explain why, under seemingly similar personal or environmental conditions, some individuals thrive and others do not. Unless taken beyond this, however, there is a risk of concluding that, since children are resilient, adversity actually does no harm and may, indeed, have beneficial effects. Lest this seem far-fetched, it is worth noting that it is not difficult to find examples of programs designed to “toughen” individuals by exposure to adverse conditions. This is reflected in the point made in some of the papers that resiliency cannot be developed unless there is exposure to risk.

The various papers that addressed the resiliency construct did go beyond this, in identifying resiliency with the existence of “protection” factors that mitigate the risk factors associated with an individual. Thus, for example, the effects of low social economic status (SES) may be offset by caring parents and a stable home environment. Conceptually, the implication here is that the probability of a desirable or undesirable outcome is a combination of the probabilities associated with each of the risk and protection factors. More specifically, as described by Terrisse, any single variable may have values linked to either risk or protection. An obvious example is SES, where a low value yields risk and a high value yields protection.

From the perspective of developing a research agenda, the most obvious point is that we need to know much more about what constitutes risk and protection factors before the full value of the resiliency construct can be established. However, the problem goes beyond this. Resiliency was defined in some of the papers by analogy to the physical concept of an object “bouncing back” after being disturbed or, more directly, to the biological concept of adaptation and to individuals living in an ecosystem. It is clear that the only value of the physical analogy is in tracing the origins of the word, since it would be extremely difficult to link the energy storage and dissipation effects associated with physical resilience to the processes going on inside an individual faced with counteracting environmental influences. The biological adaptation analogy seems more appropriate on the one hand but has disturbing consequences if taken very far because of its association with mutation and natural selection as the mechanism for adaptation. References to the need for exposure to adverse conditions as a condition for resiliency to develop and, even more extremely, to eugenics in the papers serve to remind us of the problems of applying biological analogies to human social interaction.

All of this tells us that much more work is needed before the resiliency construct is of much value for policy or programming. The most promising line of enquiry would seem to lie in attempting to delineate more clearly what constitutes “protection factors”
Outcomes and diversity The existence of diversity in our society and the desire to recognize and promote diversity, as a general principle, was widely referenced in the papers and the discussion. Diversity seems to be conceptualized generally as an input variable, most obviously in the recognition that children in Canada come from widely diverse backgrounds and have widely differing needs. It is useful, however, to reverse this thinking and ask “to what degree is diversity of outcome also considered appropriate?” On one level, we seem to accept, for example, the idea that not all children will pursue the same programs or receive the same grades in school. On another level, however, certain outcomes are taken to be universally desirable. For example, the Gingras paper simply assumed that graduation from high school is a desirable outcome for all. More fundamentally, we assume that all children should attend school and become literate and numerate. This raises the question of whether our tolerance of diversity would extend to a group in society that believes, say, that girls should not attend school or that schooling should be limited to religious instruction or to an individual who believes there is no value in attending high school. While these may seem like extreme examples, we are all familiar with instances in which challenges to conventional notions of schooling come to public attention or are the subject of litigation. These examples illustrate that diversity of outcomes seems to be less acceptable than diversity of inputs. The model under which we operate is one of taking individuals with diverse backgrounds and attempting to find ways to bring all to outcomes which, while they may differ in degree, do not differ in kind. Obviously, many of our problems of policy and programming could be solved if we were to accept that outcomes should be as diverse as inputs. Clearly, however, this runs contrary to our concept that schools and other instruments of social policy have a progressive function. At the same time, the analysis suggests that, despite the thrust to celebrate diversity, the goal of most of our social institutions is actually to bring about less diversity.

The point here is not to make a case for accepting greater diversity of outcomes. Rather it is that this issue requires much more substantial analysis. It is possible, for example, that in attempting to achieve the outcome of high school graduation for all, we ultimately reach a point of diminishing returns, at which the cost of including some individual or group far exceeds the benefit. Alternatively, we can accept that an outcome such as high school graduation is such a basic right that everyone should be given a high school certificate regardless of what they have accomplished. As an extension of this alternative, we might consider that a high school certificate is everyone’s right at a certain age but that the certificate would convey fundamentally different meanings for different individuals. This notion is already inherent in most certification systems because of differentiation of courses and grades. The question therefore is not one of principle but merely of how far we extend the differentiation of achievement in a single highly valued credential.

Inclusion and integration of services If resiliency is an example of a theoretical construct, inclusion is just as clearly an example of a deeply held belief. There is an obvious human rights argument in favour of inclusion, and court decisions have repeatedly supported this trend. While only a couple of papers addressed this issue directly, there was almost no discussion of the effectiveness of the trend toward increased inclusion of special needs students into regular schools and classrooms.

Discussions around the Lupart paper, which addressed this issue most directly, centered around implementation issues rather than around the underlying concept. For example, there were many calls for additional resources, improved teacher education, reduced classes, and generally increased support for classroom teachers. All of this suggests, as indicated by one discussion group that “funding and training are the keys to realizing the ideal.” There was also a tendency in the discussion to
link inclusion with a need for coordination of services. There was debate as to whether resources for special education services have declined, with some policy makers pointing out that these resources have increased, although perhaps not as fast as expectations. Finally, the issue was raised as to whether inclusion is being interpreted as eliminating the need for special services and treating all students alike.

It is interesting to note that a few groups, such as the deaf, have resisted inclusion on the grounds that individuals with specific disabilities form a distinct community that is better off if held together than if absorbed into the societal mainstream. Occasionally, we see the same phenomenon at work when an institution is threatened with closure on the grounds that its clients would be better off being integrated into more mainstream institutions. Much the same can be said for Aboriginal, religious, and language groups who place a premium on their distinctiveness. In such situations, a case can be made that diverse outcomes can be acceptable, as indicated above. That aside, the main issue requiring research rather than expressions of social or cultural belief is whether inclusion is effective in helping those with particular disadvantages to achieve generally valued outcomes such as literacy or high school graduation.

Integration of services may be linked to inclusion in the sense that the ultimate goal of a unified service model, with all individuals being provided services appropriate to their needs, requires coordination among the various agencies responsible for these services. The holistic image of the child at risk, referred to by Volpe and others, can be thought of as a model for both inclusion and service integration. Nevertheless, integration of services can be better described in management terms, that is, concerned with finding efficient ways to deliver services and ways of making the services more effective. The research question here can therefore be framed in terms of efficiency as well as effectiveness. In contrast, efficiency has little meaning in an inclusion model, especially one driven by human rights considerations.

2. Status of Our Empirical Knowledge
One of the most striking things about the symposium was the absence of any consensus on what we actually know about the proportion of the population of children and youth who might be defined as “at risk.” Not only were there variations in the figures cited in various papers, but these figures were generally substantially higher than the proportions now being identified in the school system as having “special needs.” Although the latter figure has been growing, the 10-12 per cent range found in most provinces is quite different from the 30 per cent or more given by some of the studies cited in the papers. While some would argue that this is as a consequence of under-identification within the school system, it is also clear that the problem is as much one of underlying conceptions of risk as it is of identification. For example, if we accept the unified approach viewed by Lupart and others as the “new wave” of the inclusion movement, then the question of how many students are at risk becomes largely irrelevant. If we accept that some identifiable groups are at greater risk than others and that it is legitimate to target such groups for interventions, then the potential number of individuals at risk is inevitably large because all members of the groups are counted regardless of the level of risk of individual members. On the other hand, the approach now taken in schools of diagnosis at an individual level will just as inevitably underestimate the number of at-risk students because the designation is not one of “risk” but of manifest behaviour.

For policy purposes, the simplest approach is probably to “work back” from the numbers who fail to achieve certain desirable outcomes. Taking, Gingras’ figures on high school dropouts, for example, we can estimate that some 15 per cent of the youth population is at risk of such an undesirable outcome. Similar figures are certainly
available for young offenders, those who smoke or use illegal drugs, or those who become pregnant by age 18. The figures are less definitive for such outcomes as “literacy” again mainly because of definition. The problem with this approach is that we are counting those who actually manifest the undesirable outcomes and not those who might have been “rescued” from such outcomes by various interventions that are already occurring or by broader societal changes that support more positive outcomes. Again, the improvement in the high school graduation rate documented by Gingras could be taken as evidence that we have been successful in reducing the risk of at least one important negative outcome.

One area in which more seems to be known is the characteristics of those at risk and the factors associated with it. Here, the research approach is relatively straightforward and is well illustrated by the work on high school dropouts. Typically, in this case, some sample of students is surveyed, various personal and environmental characteristics are tabulated, and these are correlated with an outcome, in this case graduation or non-graduation. Sometimes, in a more limited procedure, only non-graduates are surveyed and their characteristics simply described or compared to the general population. On the basis of such research, we can say with some assurance that poverty, ethnicity, family background, language difficulties, lack of engagement with the school, poor academic performance, lack of home or community support, pregnancy, behavioural problems, and a long list of other factors are associated with dropping out of high school. Similar factors have also been shown to be associated with other negative outcomes such as illegal activities.

The idea of “protection factors” means that most of the factors traditionally thought of as risk factors must now be seen as having values on a continuum from risk to protection. The various characteristics that may be measured for any individual will lie somewhere along the risk-protection continuum.

For example, one end of the SES spectrum can be linked to risk and the opposite end to protection. This, together with the resiliency construct, adds substantially to the complexity of research on the factors associated with risk. We now need to know not only what places individuals at risk but also what protects them from risk and whether some combination of risk and protection factors yields what we may call “net risk.”

This is where a probabilistic approach is obviously most useful. The model here is epidemiological studies. The goal of research might be seen as using large sample studies to estimate the probability of a particular outcome (whether positive or negative), given various values of each factor. For any individual, the net probability of an outcome could thus be estimated and used to make decisions about how to treat that individual. While the complexity of this should not be underestimated, especially since the probabilities would shift over time with changing circumstances and interventions, the model is a coherent one that can establish a large component of any research agenda. Even though there is significant risk of error in applying probabilities derived from population studies to individuals, any alternative way of determining the kinds of services required by an individual are likely to be even more risky.

On the larger issue of inclusion, the case for inclusion seems to have been built more on advocacy and human rights than on empirical evidence. It is notable that none of the papers made any reference to whether inclusion actually enhances school outcomes and life chances of individuals, especially those with severe disabilities. Of course, it is possible that human rights considerations override any other issues of effectiveness. In the extreme, if a practice is declared discriminatory, there is no longer any need to consider whether or not it is effective in helping to attain certain desirable outcomes and to avoid undesirable ones. Nevertheless, it is difficult to imagine, for example, that a court decision on discrimination would ignore any available evidence...
on outcomes or, more generally, that we would prefer not to know the consequences of such decisions for outcomes that may or not have been considered in the original decision.

Of course, one does not have to make such an extreme argument to make a case that we need to know more about the effects of our interventions. Some of the discussion pointed to the need to document effectiveness. However, there was little sense of how this can be accomplished. It is not difficult to design a general approach to a research program on the effectiveness of interventions. What is required is both large-scale comparative experiments and program evaluations directed at particular programs. The main obstacle is not in the conceptual design or methodology for such studies but in the tendency to question the appropriateness of this type of research in addressing major social problems and in the practicalities of mounting such research programs. There is little tradition in education of conducting large-scale controlled studies of particular treatments. Theorizing, advocacy, and anecdotal evidence tend to carry greater weight than empirical investigation. Additionally, the outcomes of interest are generally long term, the resources required to conduct the studies are large, and the ethical questions involved in applying alternative treatments without knowing their effects are severe (notwithstanding the fact that we do this all the time in much of our programming).
Summary: Research Directions

The discussion of this section indicates a need for research in the following directions:

1. Although we know a reasonable amount about the factors contributing to risk, one main thrust for research should be to help us improve our estimates of the proportion of the population at risk, identify the nature of the risks to which children and youth are exposed, clarify the outcomes of major concern, and determine the nature and degree of differentiation of outcomes.

2. While it seems clear that risk is multiplied as the number of risk factors increases, it is not clear how the probability of risk changes with the accumulation of risk factors. Ongoing large-scale studies such as the National Longitudinal Survey on Children and Youth or the international studies described by King and Wagemaker should shed light on this issue.

3. As an extension of the above, the concepts of protection factors and resiliency require further study to determine how such factors are balanced. Again, this lends itself to studies with samples large enough to allow various factors to be separated and the probabilities associated with combinations of these factors to be estimated.

4. Research is needed on the relative merits of a unified individualized approach for all children versus an approach targeted at those identified as being at risk. More generally, longer-term and more controlled studies are required to shed light on the effects of intervention strategies on outcomes.

5. Finally, the results reported from large-scale surveys clearly indicate the importance of such surveys in shedding light on immediate policy issues and in providing a basis for testing and elaborating theoretical concepts. Large-scale surveys, especially those of a longitudinal nature, can also be a tool for examining program effectiveness.

The fourth point highlights a fundamental conflict on what should constitute the main direction for research. Although there is much to be learned, it is clear that past research has focussed more on identifying those at risk and on the factors that affect risk than on fundamental issues such as inclusion or on developmental issues such as programming or teacher education. The view that identification and labelling can lead to stereotyping, to self-fulfilling prophesies or, as argued by Wotherspoon and Schissel, to a diversion of resources away from those who need them most, suggests that this genre of research may be unfruitful and indeed counter-productive. Instead, it might be argued that the main problem is to find out how to effectively integrate at-risk students or, more explicitly, how to implement the kind of unified individualized approach envisaged by Lupart and others. This clearly suggests a developmental agenda, focussed on programming and teacher education. The fourth point challenges this perspective, on the grounds that, whatever the human rights imperatives underlying unification, there is a need to determine the impact of different treatment approaches and indeed of different underlying conceptualizations of risk on changes in outcomes.

On balance, it is difficult to argue that we should take a concept such as inclusion or any other such belief statement as so fundamental a determinant of policy that it is beyond investigation of outcomes. While it may be true that there are conflicting outcomes and that an approach that enhances some outcomes may be detrimental to others, all of this can be investigated with properly designed long-term studies. In other fields, most notably medicine, it is common to conduct long-term controlled experiments or retrospective studies to examine the outcomes associated with alternative treatments, even in life and death situations. There are relatively few precedents for such an approach to research in education. The extensive reliance on cross-sectional surveys in education has contributed much to our knowledge about the factors associated
with risk but has yielded much less knowledge about the effectiveness of treatments. Similarly typical small-scale qualitative case studies can yield valuable insights into potentially effective interventions but can tell us little about the generalizability of such interventions. A shift in research emphasis is required. Much closer collaboration between researchers, policy makers, and practitioners is required to sustain the type of large-scale and long-term studies needed to yield better information on the effects of interventions on outcomes. One important example of such research, namely the National Longitudinal Survey on Children and Youth, was given at the symposium. In particular, some of the follow-up interventions now being implemented as part of that study, if properly documented, have the potential to yield the kind of results required.

Policy Issues

Keeping in mind that the goal of the symposium was to help establish a research agenda and not primarily to provide immediate policy directions, it is nevertheless useful to raise the question “what might policy makers take away from the symposium that may inform the decisions that must inevitably be made?” The obvious policy questions in dealing with children and youth at risk are “How do we identify those at risk,” “What programs are effective in reducing or offsetting risk?” and “What resources are required to mount the appropriate programs?”

In general, while we do know a reasonable amount about identifying at-risk individuals and groups, our ability to use that knowledge is hampered by the absence of clear indicators of the proportion of the population at risk, lack of consensus on whether it is more appropriate to target individuals or groups for possible interventions, and lack of evidence of the effectiveness of treatments. The first problem relates to resource allocations in the sense that there is no way of determining desired resource levels unless we know the size of the target population. While this makes little difference in some cases, such as public awareness campaigns, it makes an enormous difference in situations where intensive individual interventions are required.

The second point relates to the question raised earlier of prevention versus treatment. Interventions targeted at groups are more likely to have a preventative function, while those designed for individuals are more likely to have a treatment function, as illustrated by the adolescent pregnancy example. In health care, estimates are sometimes made of the relative costs of prevention and treatment and are typically used to make a case for prevention strategies (in the area of smoking, for example). However, as far as can be determined, certainly from the research presented at the symposium, no comparable estimates are available for risks that require primarily educational interventions. Despite the risk that such estimates can be used to support the agendas of advocacy groups, there is little doubt that policy making could be informed by such estimates.

The final point is illustrated by the symposium discussion, where conflicting points were made about the level of resources required. Most of the discussion seemed to be in the direction of supporting calls for greater resource allocations. However, some participants did note that substantial and growing resources are being allocated to serving those with special needs, and there was little in the papers presented to suggest that we have a good grip on how resources might be used most effectively. While it is easy to say that what we need is not more resources but better use of resources, policy makers face a significant challenge in attempting to make judgments, based on what we now know, on how resources might be reallocated. In this sense, it might be easier, bureaucratically and politically, to argue for increased resources than to face such a challenge.

The symposium proceedings suggest that it is useful to make a distinction between those at risk of unfavourable school outcomes and those having difficulty with the school-to-work transition.
Although the first obviously influences the second, there are important differences in the policy issues at stake as individuals move from childhood to adolescence and early adulthood. At the extremes of the spectrum, it is obvious that dealing with students who enter school inadequately prepared to learn to read requires a different policy response than dealing with those whose school-to-work transition is being impaired by high debt loads.

For children entering school and in the early school years, the inclusion issue is at the core of all other policy questions. No matter what our identification schemes, our treatments, or our resources, there is a profound difference between an approach in which children with special needs are treated in regular classroom settings and approaches in which there is separation by class or by institution. There is an even more fundamental distinction between a fully unified system, in which the distinction between regular and special education essentially dissolves, and one in which some children, even if integrated into regular classrooms, are identified with various forms of "special" services.

As already noted, there was no serious challenge to the overall trend toward increased inclusion, in either the symposium papers or the discussion. It appears that the belief in inclusion is firmly entrenched and that the policy issue is one not of principle but of implementation. On the surface, it might be concluded that the main issues of implementation are supports for classroom teachers, improved teacher training, and generally greater resources, all of which are goals toward which policy decisions can be directed. It was also pointed out in the discussion that it is not possible to have inclusive schools without inclusive communities.

At the same time, the broader discussion surrounding identification of those at risk, the impact of family and community circumstances on the probability of a child being at risk, and the delineation of specific risk conditions implies that there is more to the problem than simply finding ways to implement a fully unified model.

Symposium participants actively took part in discussion of identification, risk factors, and alternative programming approaches for specific identifiable groups as if these continue to be problems, even though other parts of the discussion would lead to the conclusion that these problems are largely irrelevant and that each individual should simply be treated "as found" with individualized programming for all.

The inference that can be made from the Lupart paper and the general support of a unified education system is not, in fact, that all children should be treated alike but that differentiation should be seen as the norm. The unified model appears to convey a vision of every child having a program tailored to his or her needs, with the decision on that program being made in a collaborative way and with each child being given access to whatever resources are needed to implement that program. This is essentially a clinical model, which has profound implications for the organization of schools and classrooms, as it appears to preclude treatment of children as groups, an organizational pattern that has been at the core of schooling since the beginning.

An important question is the degree to which public warrant exists for such a major change in school organization, especially if it requires any substantial increase or shift in resources. A related question is whether it is possible or, to put it more positively, what is required to implement such a shift within a highly structured bureaucratic organization. These and similar questions need to be addressed through research that is explicitly directed to policy formation and, more broadly, to research on school reform.

We might infer from the symposium presentations and from actual practice that as children grow into adolescents the emphasis shifts from inclusion to differentiation. The papers on teenage pregnancy, dropouts, and programs for black students illustrate this point. More generally, there was discussion of streaming, apprenticeship-like programs, and other
means by which some students would be treated differently to reduce the risk of dropping out of school. While there is no fundamental contradiction between an inclusion philosophy and differentiated programs, it is clear that identifying students for non-academic programs or placement in alternative schools requires a departure from the form of inclusion that seems to characterize the early school years, especially in requiring some form of separation of individuals or groups.

Turning to the school-to-work transition, an argument can be made that, no matter how effective our intervention efforts with children in school, some will continue to drop out or to graduate at achievement levels that result in significant difficulty in making a transition from school to work (or more generally from childhood to adult life). In general, research based on large-scale surveys such as the National Graduates Survey shows that most postsecondary graduates do make a successful transition from school to work and, as Finnie’s paper indicates, appear to be having less difficulty with student loan debt than is generally thought. However, we must remember that not all of our students become postsecondary graduates and that even some of the latter group do have transitional difficulties. Not all adolescents find their way into universities or community colleges and those who do not could be expected to have the greatest difficulty with the school-to-work transition.

One of the interesting features of programs for those at risk of dropping out, those who wish to drop back in, or those who require job transition training is the involvement of the federal government in sponsoring adult upgrading programs. Also notable is the ad hoc nature of such programs, which seem to depend on the initiative of local groups in seeking support under various federal and provincial programs. Although this matter received only passing reference at the symposium, through the Gingras, Finnie, and King presentations and through some of the discussion, it is clear that there is no overall strategy to provide services for older youth whose main difficulty is in making a successful transition from school to work. There is evidence, as illustrated by King’s presentation, that some other countries have been more successful than Canada in orchestrating this transition. An interesting area for policy deliberation would be an examination of whether any of the features of such systems could be used to bring more coherence to transition programs in Canada.
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