

A Survey of Educational Acceleration Practices in Canada

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Abstract

A nationwide survey of Canadian school districts was undertaken to determine the extent to which 18 forms of acceleration were permitted and practiced. Of the high enrollment provinces, BC school districts' participation rates were highest in the most types of acceleration. A surprising number of districts did not allow some forms of acceleration. In most provinces and territories, options that emphasize engaging quick learners in advanced content were more often permitted than those that involved placing accelerants with older students, but the forms most often implemented included both content- and grade-based options. Québec was the exception where school districts preferred grade-based options.

Key words: Acceleration, gifted, grade skipping, Advanced Placement, International Baccalaureate, early entrance, correspondence courses, curriculum compacting

Résumé

Une enquête nationale sur les districts scolaires canadiens a été menée pour déterminer dans quelle mesure les 18 formes d'accélération de l'apprentissage étaient autorisées et pratiquées. Parmi les provinces où les inscriptions étaient les plus nombreuses, les taux de participation dans les districts scolaires en Colombie-Britannique étaient les plus élevés pour la plupart des types d'accélération. Un nombre surprenant de districts ne permettaient pas certaines formes d'accélération. Dans la plupart des provinces et des territoires, les options permettant à ceux qui apprennent le plus vite de prendre part à des matières plus avancées, étaient plus souvent autorisées que celles consistant à placer ces mêmes élèves avec des élèves plus âgés ; mais les formes d'accélération les plus souvent mises en œuvre comprenaient à la fois ces deux types d'options. À l'exception du Québec, où les districts scolaires favorisaient le passage des élèves dans des niveaux supérieurs.

Mots-clés : accélération, surdoué, sauter une classe, placement avancé, baccalauréat international, admission précoce, cours par correspondance, compression des programmes d'études

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Education programs and curricula can be differentiated in a variety of ways to provide Canada's most capable learners with opportunities to progress at a developmentally appropriate pace, to offer them opportunities to learn "what they don't already know" (Stanley, 2000, p. 216). All of the many forms of academic acceleration enable these students to "progress though an educational program at rates faster or ages younger than conventional (Pressey, 1949, p. 2). These practices may result in advanced standing in one or more subjects, advancement in those subjects, and may also involve grade advancement.

Advanced learning and precocious intellectual development are distinguishing characteristics of gifted and highly able learners (Lubinski & Benbow, 2000; Rogers, 1986, VanTassel-Baska, 2010). These students not only acquire knowledge and skills faster than most students of the same age (Frasier & Passow, 1984), their understandings are more sophisticated and complex (VanTassel-Baska, 2010), and their passion for intellectual challenge is more intense (Bleske-Rechek, Lubinski & Benbow, 2004). Their exceptional learning potential enables them to develop skills with less practice and support than their age mates (Kanevsky, 1990; 1992).

It seems reasonable to expect that efforts to provide academically talented students with an appropriate education would include opportunities to advance through their studies at a faster pace than their chronological age mates, however this is not always the case (Colangelo, Assouline & Gross, 2004a; 2004b). The two volumes of "A Nation Deceived" (Colangelo, et al., 2004b) chronicled, critiqued and summarized almost 100 years of research and drew attention to the ways in which high ability learners could be offered opportunities to move through their studies at a faster, more developmentally appropriate pace. The "gulf between what research has revealed and what most practitioners believe" (Borland, 1989, p. 185) remains in spite of the accumulation of research evidence documenting its benefits. "The recurring refrain from this research is that both grade-based (e.g., grade-skipping) and content-based (e.g., Advanced Placement classes) acceleration are effective, though underused, interventions in academic and social-emotional domains for high-ability students" (Lohman & Marron, 2008, p. 3).

Forms of acceleration

Grade skipping may be the most familiar form of acceleration but it is only one of a varied collection of practices that enable high potential students to learn and move through school more quickly. Southern and Jones (1991; 2004) described 17 forms of acceleration and the 2009 Work Group on Acceleration added International Baccalaureate (IB) programs to the options bringing the count total to 18 (see Table 1). Each is defined briefly in the Appendix. The nine that emphasize the rate at which new subject matter is introduced are considered content-based while the eight that involve moving students into settings with older students (as well as advanced content) are considered grade-based (Work Group on Acceleration, 2009). The latter always results in subject or whole grade advancement and reduces "the number of years that a student spends in the K-12 system" (Work Group on Acceleration, 2009). The practices in Table 1 may overlap so implementing one may involve others (Southern & Jones, 2004). For example, students may enroll in an online distance education course to study advanced content in addition to their regular studies. It might be considered "extracurricular" as well as a "correspondence course" because it is taken for credit outside of school hours.

Table 1.
Content- and grade-based forms of acceleration.

Content-based	Grade-based
<ul style="list-style-type: none"> • Advanced Placement • Concurrent enrollment • Correspondence courses • Credit by examination • Curriculum compacting • Extracurricular programs • International Baccalaureate Programs • Mentoring • Single-subject or subject matter acceleration 	<ul style="list-style-type: none"> • Combined classes • Continuous progress • Early admission to Kindergarten or Grade 1 • Early entrance to middle school, high school, or college • Early graduation from high school • Grade-skipping (whole grade acceleration) • Self-paced instruction • Telescoping curriculum

Effects of Acceleration on Academic, Social and Emotional Development

The many forms of acceleration remain some of the most controversial practices in education. Research examining the effects of all types of educational acceleration on academic, social and emotional development of highly able learners has provided consistent and convincing evidence of its benefits (e.g., Colangelo, et al., 2004a; 2004b; Kulik & Kulik, 1984a, 1984b; Rogers, 1991; Steenbergen-Hu & Moon, 2011) and students have rated it as one of the most desirable forms of curriculum differentiation (Kanevsky, in press).

Rigorous meta-analyses undertaken by Kulik and Kulik (1984a; 1984b) and Rogers (1991) concluded that achievement test scores of students who were carefully selected for acceleration were 0.8 standard deviations higher than those of students of equivalent ability who were not accelerated, i.e., their scores reflected an increase of an additional year on a grade-equivalent scale (Wells, Lohman & Marron, 2009). Early entrance to kindergarten, Grade 1 and single subject acceleration have also been used successfully to “prevent and reverse” gifted students’ underachievement in elementary grades (Rimm & Lovance, 1992).

Concerns regarding the impact of acceleration on social and emotional development of bright students have persisted longer and stronger than those related to academic achievement. A number of factors contribute to this dilemma: fewer investigations of adjustment have been undertaken, their effects were seldom as dramatic as the impact on achievement, and their results were difficult to synthesize due to conceptual and methodological differences. That said, they do indicate that the psycho-social development of accelerants was not harmed and accelerants felt

more positively about themselves and their schooling than equally able non-accelerants. In her 20-year longitudinal qualitative study of 60 Australian students with IQs of 160 and above, Gross (2006) concluded:

The considerable majority of young people who have been radically accelerated, or who accelerated by 2 years, report high degrees of life satisfaction, have taken research degrees at leading universities, have professional careers, and report facilitative social and love relationships. Young people of equal abilities who accelerated by only 1 year or who have not been permitted acceleration have tended to enter less academically rigorous college courses, report lower levels of life satisfaction, and in many cases, experience significant difficulties with socialization. (p. 404)

Hoekman, McCormick and Gross (1999; cited in Rogers, 2007) also found the stress levels of gifted adolescents “were substantially higher when they were placed in unchallenging classroom settings; conversely, stress was considerably reduced for these students when they were subjected to high levels of challenge and rigor and subsequently were successful in meeting the challenge” (p.385). Accelerants (early entrants to school or students who had skipped one grade) in the 1988 National Educational Longitudinal Study (NELS) felt better about their social relationships and emotional development, and had fewer serious behaviour problems in school than their chronologically older classmates in eighth grade (Sayler & Brookshire, 1993). When comparing the self-esteem and self-perceptions of accelerants and non-accelerants, Swiatek (1994) found no differences in the changes experienced by these groups of students between the ages of 13 and 18 in her longitudinal study.

When reflecting on acceleration later in life, gifted individuals revealed “they do not regret their acceleration. Rather they regret not having accelerated more” (Bleske-Recheck, et al., 2004, p. 221). Accelerants in New Zealand and the U.S. reported they enjoyed the academic benefits of the difficult work involved in their accelerated courses (Bleske-Recheck, et al., 2004; Hertberg-Davis, Callahan, & Kyburg, 2006; Lee, Olszewski-Kubilus & Peternel, 2010; Rawlins, 2004).

Declines in the self-concept of accelerants reported by Zeidner and Schleyer (1999) have been contested by Plucker, Robinson, Greenspon, Feldhusen, McCoach, and Subotnik (2004). The latter pointed out that although accelerants’ self-concepts declined, they remained high. They suggested a potential “modesty effect” might have arisen when accelerants interacted with “like-minded peers.”

Successful acceleration depends on comprehensive assessment, thoughtful decision-making involving all stakeholders and flexible implementation that is carefully monitored. In these circumstances, educational acceleration appears to promote social development, reduces boredom, and enhances academic achievement and attitudes toward school. Given the well-documented potential academic, social and emotional benefits, it appears these practices should be encouraged and made broadly available to suitable candidates, but are they?

Use of Accelerative Practices

The majority of studies examining acceleration have focused on its effects, however a small number of studies could be found that investigated the extent to which the different forms of acceleration have been implemented. The findings of Witham’s (1994) survey of acceleration practices in 14 public and 10 American private schools with self-contained classes for students identified as gifted indicated content-based acceleration practices were preferred over grade-based. More than 63% of respondents in public schools and 82% in private schools reported

using materials two or more years beyond grade level. She found 25.9% of respondents indicated they had students who had skipped grades and 43.5% had students who were admitted to school early. She considered these rates low in light of those for the use of advanced content. The rates for content-based acceleration also seem low considering the sample included only full-time classes for identified gifted students.

Belcastro's (1998) survey of gifted programs in Iowa's public schools focused primarily on grade-based forms of acceleration. Responses from 171 of the state's 379 school districts (45% response rate) revealed concurrent enrollment was most popular (used in 55% of school districts), followed by grade-skipping up to 3 years during a student's years in school (46.2%), Advanced Placement (AP) courses (40.9%), mentorships (36.3%), continuous progress (27.5%), early entrance (20.5%), skipping three or more years (17.5%) and fast paced courses (12.9%). It is interesting that the rate for skipping up to three grades were actually higher in Iowa than in Witham's sample of self-contained classes.

Focusing on American high schools, Peters and Mann (2009) reported 71% offered concurrent enrollment, 67% offered AP courses, and 2% offered IB coursework. In one state, Indiana, participation rates for these forms of acceleration were 38%, 70% and 3% respectively. Forty-nine percent of the state's high schools also offered "advanced classes" and 5% offered independent study or mentorships. Both Iowa's and Indiana's rates for concurrent enrollment were below the national rate.

Like Witham (1994), Kanevsky (2005) also found content-based forms of acceleration were more popular in K-12 school districts in British Columbia (BC). Further, she found they were more likely to permit each of 17 forms of acceleration described by Southern and Jones (2004) than they were to actually have students participate in them. For example, although 100% of school districts reported allowing students to take correspondence courses as a means of accessing advanced content, only 80.8% had one or more students do this in the 2004-2005 school year. Skipping a single grade was permitted in 69% of school districts, however only 42.3% of school districts had one or more students participate in grade skipping. The findings on challenging or "testing out of" coursework were intriguing. Although provincial policy calls for this practice (British Columbia Ministry of Education, 2004) only 69% reported permitting it and 61.5% participated. The gaps between the percentages of districts permitting and participating in each form of acceleration are likely due to a combination of factors including concerns related to their impact on social and emotional adjustment and what to do with students when they complete grade level and advanced coursework ahead of their age mates (Southern & Jones, 1992). There were three exceptions to this trend, all content-based, where permission and participation rates were identical: IB (34.6%), AP (61.5%), and concurrent enrollment (46.2%).

There is some evidence that grade acceleration may be declining in popularity in the U.S. When comparing the 1988 and 2002 datasets from the National Center for Educational Statistics, National Educational Longitudinal Study (NELS), Wells, Lohman & Marron (2009) found a smaller percentage of students had skipped a grade in 2002. They suggested this may be due to increased opportunities to accelerate in a single subject, and/or increased access to other programming options, e.g., enrichment activities. They also "found that girls were more likely to have skipped a grade during elementary school" (p. 267) and that "coastal regions have more students who have been accelerated" (p. 269). They regretted their regional analysis, suggesting that using States as the unit of analysis would have been more appropriate due to differences in state policies, particularly those related to early entrance and grade skipping.

Two general observations can be deduced from these spotty North American statistics that were collected over a 15 year span and were based on different types of samples using various

instruments. First, participation levels were low considering the strength of the empirical support for them. Second, content-based forms were more popular than grade-based. With response rates below 50% in all of these studies, questions arise regarding self-selection bias and whether or not the samples are representative. A self-selection bias is likely in studies relying on self-report surveys as those districts that were more engaged in and supportive of acceleration were more likely to respond. Other factors contributing to the variations in findings across the studies include differences in stakeholders' beliefs regarding the risks, benefits, and costs associated with each form of acceleration and differences in policies across jurisdictions.

Research Problem

The various forms of acceleration are essential features of systems of education involving academically talented students as their achievement “falls dramatically when they are required to do routine work at a routine pace” (Kulik, 1992, p. 7). Given the need and accumulation of overwhelmingly positive support for them, there is a need to encourage their implementation. Prior to this study, reports of support for and resistance to any form of acceleration in Canada were anecdotal, and often based on personal experience. No statistics exist on the extent to which any of the many forms of acceleration are permitted or practiced in Canadian schools. Educators and researchers need to know where they are permitted and practiced. Each public school district, large and small, needed to be surveyed, to provide an objective indication of the degree to which each form of acceleration was supported and practiced in each Canadian province and territory. The findings of this study will establish a baseline for efforts to monitor changes in the extent to which all content- and grade-based forms of accelerated learning experiences are permitted and implemented in each Canadian province and territory.

Permission to accelerate and participation in acceleration were investigated separately to address the old adage, “Actions speak louder than words.” A baseline for both provides a better understanding of those forms of acceleration that school districts were willing to support as well as those that they practiced; those that districts refuse to practice; and those that districts claim to support but are not practicing. Each set of statistics (permission, refusal and participation rates) provides insight on a different aspect of current practice.

Southern and Jones (1992) found rural school districts were less likely to accelerate students, therefore a school district's enrollment was expected to be a factor in its ability and willingness to offer some acceleration options. Canadian school districts range in size from diminutive rural and independent school districts, like Englefeld Protestant in Saskatchewan with just over 100 students, to enormous urban districts like Toronto with 274,000 students. Some accelerative options require a ‘critical mass’ before they are likely to be considered economically feasible due to the resources required to support them (Southern & Jones, 2004). For example, offering Advanced Placement (AP) courses might require sufficient school or district enrollment to fill a class in order to justify a teaching assignment for a teacher. It was expected that larger districts would offer some types of acceleration that small districts may not, therefore we also sought to determine which forms of acceleration were most sensitive to district enrollment. In summary, four questions were addressed:

1. How and to what extent were school districts across Canada and within each province and territory permitting students to be accelerated?
2. Was willingness greater to permit and participate in content- or grade-based forms of acceleration?
3. How and to what extent were students actually accelerated during one school year across

Canada as well as within the provinces and territories?

4. Was permission to, or participation in, any form of acceleration related to a school district's total enrollment?

Methods

Participants

All provinces and territories were included. Each of the 366 public school districts* identified in the Canadian Education Association's (CEA) 2006 *Directory of Key Contacts in Canadian Education* (Canadian Education Association, 2006) was first contacted by phone and asked to identify the individual responsible for services for gifted students or the individual most likely to have answers to questions related to acceleration practices. A packet of research materials was then sent via regular mail to this individual.

Instrument

A 17-item survey had been developed and piloted in an earlier study of acceleration practices in British Columbia (Kanevsky, 2005). The language and format of the items were clarified based on feedback from respondents. English and French versions of all research materials were developed. These included a cover letter, the survey and a glossary of definitions for the types of acceleration (see the Appendix).

Each survey item addressed one form of acceleration described in the Appendix. Single and multi-year grade skipping were addressed separately. Each item had two elements: "(a)" addressed permission to engage in a specified type of acceleration by asking if the district allowed it; and "(b)" addressed participation, asking if any students had experienced it during the 2006-2007 school year. Respondents circled one of three response options to (a) and (b): "yes," "no" or "don't know." Items related to concurrent enrollment, AP and IB programs did not include "(a)" as support for these options was assumed if they were offered. Additional prompts on the IB items were included to explore the level(s) of IB program offered (Primary Years, Middle Years and Diploma Program).

Procedure

Two rounds of survey materials were sent to each school district contact in each language. The first mailing in English went out in late April 2007; the second went out to non-respondents at the end of May. Francophone school districts were not responding to the first mailing of English materials so the materials were translated. The first round of materials in French went out in June 2007, the second in September.

Results

Completed surveys were returned by 163 of the 366 districts resulting in a 44.5% response rate. Tables 2 and 3 summarize the results. Enrollment, numbers of respondents and response rates for Canada (based on pooled data), each province and territory appear in the top rows of each table. Table 2 includes provinces with enrollments greater than 150,000 students, and Table

* For simplicity, the term "school district" is used throughout this document to refer to jurisdictions responsible for K-12 education in a region. Locally they may be identified as the school board, commission scolaire, board of education, or other terms.

3 for those less than 150,000. Enrollment values are based on the data provided for each school district in the *2006 KI-ES-KI Handbook – Directory of Key Contacts in Canadian Education* (CEA, 2006). They include only the enrollment for districts responding to the survey; they do not include all districts in each province or territory. No response was received from Nunavut so it has not been included in the table or analysis.

Table 2. Permission and participation rates for each type of acceleration in provinces with enrollments greater than 150,000 students*(Types of acceleration followed by "(C)" are content-based; types followed by "(G)" are grade-based)*

	CANADA			BRITISH COLUMBIA			ALBERTA			SASKATCHEWAN			MANITOBA			ONTARIO			QUEBEC		
Enrollment	4,776,642			581,231			535,895			175,638			189,359			2,056,225			851,332		
Total # of surveys sent	366			59			61			27			38			72			70		
Total # of surveys received	163			32			28			14			24			31			17		
Response Rate	44.5%			54.2%			45.9%			51.9%			63.2%			43.1%			24.3%		
	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate
Correspondence Courses (C)	89.0	7.4	77.2	100.0	0.0	93.8	100.0	0.0	100.0	100.0	0.0	100.0	100.0	0.0	62.5	80.6	12.9	67.7	47.1	47.1	17.6
Subject-Matter Acceleration (C)	76.1	19.0	62.3	96.9	0.0	81.2	82.1	10.7	70.4	64.3	35.7	64.3	58.3	29.2	41.7	83.9	12.9	71.0	47.1	47.1	40.0
Early High School Graduation (G)	76.1	14.1	32.7	87.5	0.0	50.0	82.1	10.7	39.3	78.6	14.3	28.6	75.0	12.5	16.7	77.4	16.1	35.5	58.8	29.4	25.0
Extracurricular Programs (C)	73.5	21.0	55.0	93.8	3.1	71.9	85.7	14.3	64.3	50.0	42.9	42.9	75.0	16.7	29.2	77.4	19.4	66.7	37.5	56.2	33.3
Curriculum Compacting (C)	73.0	16.6	50.6	87.5	3.1	68.8	82.1	10.7	53.6	64.3	28.6	57.1	66.7	25.0	33.3	77.4	9.7	56.7	41.2	41.2	41.2
Credit by Examination (C)	72.2	18.5	36.1	90.3	3.2	58.1	85.7	10.7	40.0	64.3	35.7	14.3	79.2	16.7	26.1	43.3	26.7	24.1	76.5	23.5	31.2
Continuous Progress (G)	67.9	30.8	56.7	93.5	6.5	74.2	77.8	22.2	63.0	64.3	35.7	61.5	40.9	59.1	34.8	58.1	35.5	51.6	76.5	23.5	53.3
Mentoring (C)	67.5	22.7	36.0	84.4	9.4	48.4	82.1	10.7	50.0	71.4	21.4	28.6	70.8	12.5	25.0	54.8	35.5	36.7	23.5	64.7	23.5
Self-Paced Instruction (G)	65.6	28.8	55.9	90.6	6.2	74.2	75.0	21.4	60.7	85.7	14.3	85.7	75.0	25.0	62.5	45.2	45.2	38.7	23.5	70.6	18.8
Early Entrance to Middle or Secondary School (G)	65.6	29.4	28.5	84.4	12.5	37.5	77.8	22.2	25.9	35.7	50.0	15.4	39.1	56.5	0.0	63.3	30.0	41.4	70.6	23.5	43.8
Grade Skip: One grade (G)	64.1	34.0	29.9	73.3	26.7	44.8	67.9	28.6	21.4	35.7	57.1	0.0	50.0	50.0	13.6	62.1	37.9	40.0	82.4	11.8	43.8
Combined Classes (G)	62.9	32.7	58.0	81.2	9.4	71.0	57.1	39.3	44.4	50.0	50.0	50.0	43.5	52.2	43.5	82.8	17.2	75.9	43.8	50.0	56.2
Telescoped Curriculum (G)	44.1	29.8	44.0	75.0	0.0	46.9	46.4	32.1	25.0	42.9	42.9	42.9	37.5	50.0	16.7	22.6	32.3	13.3	41.2	47.1	41.2
Early Entrance to Kindergarten (G)	37.0	58.6	29.7	15.6	78.1	0.0	64.3	32.1	50.0	35.7	57.1	38.5	16.7	79.2	13.0	36.7	56.7	30.0	94.1	5.9	88.2
Early Entrance to Grade 1 (G)	34.8	60.2	16.0	38.7	51.6	13.3	48.1	51.9	19.2	35.7	57.1	15.4	12.5	83.3	4.3	16.1	74.2	9.7	88.2	11.8	50.0
Grade Skip: More than one grade (G)	12.4	81.4	0.0	24.1	55.2	0.0	14.3	85.7	0.0	14.3	78.6	0.0	12.5	83.3	0.0	6.5	90.3	0.0	n/a*	n/a*	n/a*
Advanced Placement (C)	n/a	n/a	44.1	n/a	n/a	56.2	n/a	n/a	32.1	n/a	n/a	71.4	n/a	n/a	45.8	n/a	n/a	50.0	n/a	n/a	6.2
Concurrent Enrollment (C)	n/a	n/a	26.1	n/a	n/a	53.1	n/a	n/a	3.7	n/a	n/a	21.4	n/a	n/a	26.1	n/a	n/a	29.0	n/a	n/a	5.9
International Baccalaureate (C)	n/a	n/a	22.3	n/a	n/a	23.3	n/a	n/a	22.2	n/a	n/a	14.3	n/a	n/a	8.3	n/a	n/a	27.6	n/a	n/a	50.0

* Item missing from French version of survey to Quebec

Table 3. Permission and participation rates for each type of acceleration in provinces with enrollments less than 150,000 students*(Types of acceleration followed by "(C)" are content-based; types followed by "(G)" are grade-based)*

	NOVA SCOTIA			NEW BRUNSWICK			NEWFOUNDLAND			NORTH WEST TERRITORIES			PRINCE EDWARD ISLAND			YUKON TERRITORY			
Enrollment	145,836			116,109			79,404			9,295			22,214			5,104			
Total # of surveys sent	8			14			4			7			3			1			
Total # of surveys received	4			5			1			5			1			1			
Response Rate	50.0%			25.0%			35.7%			71.4%			33.3%			100.0%			
	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	Yes	No	Participate	
Correspondence Courses (C)	100.0	0.0	100.0	60.0	0.0	60.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	
Subject-Matter Acceleration (C)	100.0	0.0	50.0	80.0	20.0	40.0	100.0	0.0	0.0	80.0	20.0	60.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0
Early High School Graduation (G)	50.0	25.0	25.0	40.0	60.0	20.0	0.0	0.0	0.0	100.0	0.0	20.0	100.0	0.0	0.0	0.0	100.0	0.0	
Extracurricular Programs (C)	50.0	50.0	75.0	40.0	20.0	20.0	0.0	0.0	0.0	80.0	20.0	60.0	100.0	0.0	100.0	100.0	0.0	100.0	
Curriculum Compacting (C)	50.0	25.0	25.0	80.0	20.0	40.0	100.0	0.0	0.0	80.0	0.0	40.0	100.0	0.0	0.0	0.0	100.0	0.0	
Credit by Examination (C)	75.0	0.0	100.0	60.0	40.0	20.0	100.0	0.0	0.0	40.0	40.0	60.0	0.0	100.0	0.0	100.0	0.0	0.0	
Continuous Progress (G)	50.0	50.0	50.0	60.0	40.0	60.0	0.0	100.0	0.0	80.0	20.0	80.0	0.0	100.0	0.0	0.0	100.0	0.0	
Mentoring (C)	50.0	50.0	0.0	60.0	20.0	20.0	100.0	0.0	0.0	80.0	0.0	40.0	100.0	0.0	0.0	100.0	0.0	100.0	
Self-Paced Instruction (G)	50.0	50.0	50.0	40.0	40.0	20.0	0.0	0.0	0.0	80.0	0.0	80.0	0.0	100.0	0.0	100.0	0.0	100.0	
Early Entrance to Middle or Secondary School (G)	50.0	50.0	0.0	60.0	20.0	20.0	100.0	0.0	0.0	100.0	0.0	80.0	100.0	0.0	0.0	0.0	100.0	0.0	
Grade Skip: One grade (G)	25.0	75.0	0.0	80.0	20.0	40.0	100.0	0.0	0.0	100.0	0.0	50.0	100.0	0.0	100.0	0.0	100.0	0.0	
Combined Classes (G)	75.0	25.0	75.0	60.0	40.0	60.0	100.0	0.0	100.0	20.0	60.0	20.0	100.0	0.0	100.0	0.0	100.0	0.0	
Telescoped Curriculum (G)	25.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	100.0	20.0	40.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	
Early Entrance to Kindergarten (G)	25.0	75.0	25.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	
Early Entrance to Grade 1 (G)	25.0	75.0	25.0	20.0	80.0	0.0	0.0	100.0	0.0	20.0	80.0	20.0	0.0	100.0	0.0	0.0	100.0	0.0	
Grade Skip: More than one grade (G)	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	
Advanced Placement (C)	n/a	n/a	50.0	n/a	n/a	80.0	n/a	n/a	0.0	n/a	n/a	20.0	n/a	n/a	0.0	n/a	n/a	0.0	
Concurrent Enrollment (C)	n/a	n/a	75.0	n/a	n/a	40.0	n/a	n/a	0.0	n/a	n/a	20.0	n/a	n/a	0.0	n/a	n/a	0.0	
International Baccalaureate (C)	n/a	n/a	25.0	n/a	n/a	20.0	n/a	n/a	0.0	n/a	n/a	0.0	n/a	n/a	0.0	n/a	n/a	0.0	

Values in the columns headed “Yes” indicate the “permission rates” for each form of acceleration, i.e., the percentage of districts allowing the type of acceleration identified in each row. Values in the columns labeled “No” represent the “refusal rate,” i.e., the percentage of school districts that indicated they did not allow each type of acceleration. Where the sum of the values in the “Yes” and “No” columns is less than 100%, the balance represents either “don’t know” responses or no response for that item. Participation rates appearing in the columns headed “Participate” indicate the percentage of school districts that reported at least one student had undertaken each type of acceleration during the 2006-2007 school year.

The order in which the types of acceleration appear in the tables was based on the nationwide (pooled) participation rate, from highest to lowest. AP, concurrent enrollment and IB programs are clustered at the bottom because data was collected only for participation, not permission.

Permission Rates

The first research question addressed the extent to which each form of acceleration was permitted across Canada and in each province and territory. The range of values in the “Yes” columns in Tables 2 and 3 make it clear some forms of acceleration enjoyed much greater support than others, and some were extremely unpopular. Enrolling students in correspondence courses was allowed in more districts than any other form of acceleration across Canada (89.6% of responding districts nationwide, and 100% in seven provinces and two territories). Early graduation from high school and subject-matter acceleration were tied for second rank, both having the support of more than three quarters of respondents. Curriculum compacting, extracurricular coursework and credit by examination had similar national permission rates in the low 70% range. Mentoring and five types of grade-based acceleration were in the 60% range (continuous progress, self-paced learning, early entrance to middle and high school, skipping one grade and combined classes). Three more grade-based forms had rates in the 40 and 20 percent ranges (telescoped curriculum, early entrance to kindergarten and Grade 1). Skipping more than one grade was permitted least often (only 12.4% of districts nationwide).

Of the provinces with the largest enrollments, school districts in BC, Alberta, Saskatchewan and Ontario allowed the greatest range of accelerative options. BC school districts reported the highest permission rates for 12, and were second on two more; Alberta was second on 11. Québec’s school districts most often permitted three and least often permitted seven.

The range of permission rates found in provinces with large enrollments is also evident in jurisdictions with enrollments less than 150,000 students. Comparisons across provinces and territories with small enrollments were deemed inappropriate with so few responses. There is evidence that the popularity of correspondence courses, subject matter acceleration and curriculum compacting were relatively high, again, as they had been in provinces with large enrollments. Grade skipping and early entrance to kindergarten and first grade were again most seldom sanctioned. Most districts allowed students to skip one grade but none permitted multi-year grade skipping. In all of the jurisdictions with smaller enrollments, only one school district in Nova Scotia allowed early entrance to kindergarten. Early graduation from high school was authorized less often than in provinces with higher enrollments.

In both Tables 2 and 3, content-based accelerative options appear with a “C” following their names while those with a “G” following their names involve grade-based acceleration. A comparison of these values was undertaken to address the second research question regarding potential differences in jurisdictions’ willingness to support these two categories of acceleration practices. Content-based forms of acceleration dominate the top ranks across Canada and in most provinces indicating they were permitted in a greater proportion of school districts than those that involved arranging for students to learn with older students. Québec was the intriguing exception. In Québec, the forms of acceleration that involved adjustments of students’ grade placement had the greatest support. Québec led the nation with the highest percentage of school boards allowing early entrance to kindergarten (94.1%) or Grade 1 (88.2%), and skipping one grade (82.4%). This is due to “Dérogation 52” which came into effect in the 1980’s (Gagné & Gagnier, 2003). It is a provision allowing for an “exception to the age of admission to school” (dérogation à l’âge d’admission à l’école), which means schools can receive funding for early entrants. As a result of this initiative, the proportion of Québec’s school districts allowing children to begin kindergarten early is the highest in the country and more than twice the national rate (94.1% vs. 37% respectively).

Refusal Rates

Refusal rates provided a second perspective on the first research question. They offered insights on the extent to which the forms of acceleration were *not* permitted, in fact they were resisted. Refusal rates usually mirrored permission rates but deserve separate comment as these negative responses result in a lack of access to each form of acceleration for students. All nine forms with the highest refusal rates were grade-based. More than 80% of responding school districts did not allow students to skip more than one grade and 34% prohibited skipping a single year. Approximately 60% of districts prohibited early entrance to kindergarten or Grade 1. Five more options earned national refusal rates between 28.8% and 32.7%: combined classes, continuous progress, telescoped curriculum, early entrance to middle or secondary school, and self-paced instruction. The provinces varied significantly around these averages. For example, provincial rates for forbidding self-paced instruction ranged from a low of 6.2% of school districts in BC to 70.6% in Québec. These extremes were reversed when looking at early entrance to Kindergarten. In that case, only 5.9% of Québec districts did not allow it while 78.1% of BC’s refused it. Responding school districts from Québec were most likely to deny students content-based accelerative options while those in Manitoba were most resistant to grade-based options. Skipping more than one grade and early entrance to kindergarten and Grade 1 had the least support. As described earlier, Québec was the exception to this finding.

Among the provinces and territories with smaller enrollments, districts in Nova Scotia, New Brunswick and the Yukon resisted engaging in each form of acceleration. As in provinces with higher enrollments, grade-skipping and early entrance to Kindergarten or Grade 1 had the highest rates of refusal. Again, grade-based rather than content-based options, were more likely to be resisted.

Participation Rates

The percentages of responding districts in each jurisdiction that accelerated at least one student during the school year via each form of acceleration address the third research

question. The results appear in the columns headed “Participate” in Tables 2 and 3. As Kanevsky (2005) found in BC, these values were consistently lower than permission rates indicating fewer districts implemented each type of acceleration than allowed them. One explanation for this finding may be that suitable candidates were not found during that year. This was more likely in small districts. In large districts, where candidates might have been found, it may be they either were not sought or not offered these opportunities to accelerate. It is also possible, in both large and small districts, that opportunities were offered, but students, and perhaps their families, chose not to accept them. In a few cases, participation rates were higher than permission rates. Two examples can be found in Nova Scotia for extracurricular programs and credit by examination. It is possible that these anomalies reflect actions taken on behalf of individual students that were not consistent with standard practices.

Although correspondence courses and subject-matter acceleration again held the top two ranks, as they did in the national results for permission rates, the remaining forms of acceleration shifted positions dramatically. Combined classes ranked third with 58% of districts reporting they had used them to accelerate students learning when it had been ranked 11th in permission rates. Continuous progress was fourth and self-paced instruction fifth, followed by extracurricular programs and curriculum compacting. Participation rates were less than 50% for AP, telescoped curriculum, credit by examination, mentoring, early high school graduation, skipping one year, early entrance to kindergarten, middle or secondary school, concurrent enrollment, IB, early entrance to Grade 1, and finally, multi-year grade skipping.

Among the provinces with large enrollments, BC had the highest participation rates for eight types of acceleration. Québec was highest on three; Alberta, Saskatchewan and Ontario on one each. Alberta, Saskatchewan and Ontario shared most of the second and third positions on many of the accelerative options. Manitoba had the lowest participation rates for nine and Québec’s rates were lowest for four more. Overall, districts from BC indicated the greatest engagement in acceleration and Manitoba the least.

Due to the small number of districts and respondents involved, only one observation could be made regarding participation rates from provinces and territories with small enrollments (see Table 3): more forms of acceleration were undertaken in jurisdictions from which more than one district responded.

Almost twice as many school districts AP courses as offered IB (43.5% vs. 22.9% respectively). Once again, respondents from Québec defied this trend as 50% of the districts reported offering IB but only 6.2% (one school) offered AP courses. In most of Canada, the popularity of AP courses over the IB programs is likely due to the relatively greater commitment of resources involved in earning and maintaining IB school program status when compared to those involved in offering AP courses.

Thirty-five Canadian school districts reported offering one or more of the three IB programs: Primary, Middle Years, and Diploma (high school). Only two school districts in Alberta and two in Québec reported offering all three levels. Of the three programs, the IB Diploma Program was most established. It was underway in 35 school districts across Canada, nine in Ontario, seven in BC and Québec, five in Alberta, three in Saskatchewan, two in Manitoba, one in Nova Scotia and one in New Brunswick. Nine school districts offered the Middle Years Program (four in Québec, three in Alberta, one in Ontario and one in Saskatchewan) and seven offered the Primary Years Program (three in Québec and Alberta, and one in BC).

Reconnecting with the second research question, the two forms of acceleration used most frequently were both content-based (correspondence courses, 77.2%; subject-matter acceleration, 62.3%). The next three ranks were held by forms of grade-based acceleration with participation rates in the 50 percent range (combined classes, continuous progress, and self-paced instruction). Extracurricular programs and curriculum compacting, both content-based, earned the next two positions having been used in 55% and 50.6% of districts respectively. These findings, although mixed, suggest that engaging students in more advanced content was a more popular intervention than placing highly able learners in settings with older age mates in order to access advanced learning opportunities.

Relationship between district size, permission and participation rates

Point-biserial correlations with two-tailed tests of significance were computed to address the fourth research question that examined the relationship between school district enrollment and permission or participation rates across Canada (see Table 4). Responses from all provinces and territories were pooled for this analysis.

Table 4.

Correlations between school district enrollment, permission and participation rates for each type of acceleration across Canada.

	Permit			Participate		
	<i>r</i>	<i>p</i>	N	<i>r</i>	<i>p</i>	N
Correspondence Courses (C)	-.09	0.279	158	-.08	0.349	143
Subject-Matter Acceleration (C)	.10	0.218	155	.13	0.135	133
Early High School Graduation (G)	.06	0.439	147	.33**	0.001	108
Curriculum Compacting (C)	.15	0.071	146	.28**	0.002	121
Extracurricular Programs (C)	.04	0.642	153	.16	0.064	129
Credit by Examination (C)	.01	0.922	147	.21*	0.032	107
Mentoring (C)	-.03	0.735	147	.16	0.091	119
Continuous Progress (G)	.03	0.757	157	.06	0.473	143
Self-Paced Instruction (G)	.01	0.955	154	-.01	0.941	140
Early Entrance to Middle or Secondary School (G)	.11	0.160	152	.34**	0.000	120
Grade Skip: One grade (G)	.07	0.386	154	.37**	0.000	126
Combined Classes (G)	.21**	0.010	152	.24**	0.003	146
Telescoped Curriculum (G)	.13	0.146	119	.28**	0.005	100
Early Entrance to Kindergarten (G)	.00	0.998	155	.10	0.249	147
Early Entrance to Grade 1 (G)	.21*	0.011	153	.24**	0.005	136
Grade Skip: More than one grade (G)	.12	0.181	137	***	***	***
Advanced Placement (C)	nd	nd	nd	.34**	0.000	148
Concurrent Enrollment (C)	nd	nd	nd	.27**	0.006	106
International Baccalaureate (C)	nd	nd	nd	.47**	0.000	152

* $p \leq .05$ level

** $p \leq .01$ level

*** No school districts advanced a student 2 or more grades so these values were not computed.

nd = no data

The strength of the relationship between enrollment and participation rates was more often significant than the relationship between enrollment and permission rates. Weak, but significant, positive relationships were found between enrollment and the likelihood a district permitted combined classes ($r=.21$) or early admission to Grade 1 ($r=.21$). These

findings indicate enrollment was not related to a district's willingness to accelerate students with respect to most forms of acceleration, however larger districts were slightly more likely to sanction placing students in combined classes and admitting students to Grade 1 before their age mates.

The likelihood that at least one student in a district participated in eleven types of acceleration was positively correlated with enrollment to a statistically significant degree. They included: credit by examination ($r=.21$), combined classes ($r=.24$), early entrance to Grade 1 ($r=.24$), concurrent enrollment ($r=.27$), curriculum compacting ($r=.28$), telescoped curriculum ($r=.28$), early high school graduation ($r=.33$), early entrance to middle or secondary school ($r=.34$), AP ($r=.34$), skip 1 year ($r=.37$), and IB ($r=.47$). Correlations less than .30 were considered weak although they achieved significance. All of the statistically significant correlations between enrollment and participation were stronger than those with permission.

Two of the stronger, but still only moderate correlations were found with the two programs that involve the participation of an entire class: AP and IB. IB had the strongest relationship with enrollment (.47); AP's was notably lower (.34). In both cases, districts not only had to support these options but also needed a critical mass of students in, or attracted to, one school who were willing to engage in it. Large district enrollment may be slightly less important to AP offerings because districts can select individual courses to offer, or individual students can enroll online, rather than committing to an entire multi-course program as is required by the IB Organization. As mentioned earlier, IB programs are more costly, are more closely monitored, and have greater training requirements than AP (Peters & Mann, 2009). These considerations may make them difficult, if not impossible for small districts to afford.

Discussion

The many forms of educational acceleration are underway in a substantial number of school districts across Canada however many of the districts that reported supporting them had not implemented them during the school year. A small, but noteworthy, percentage neither supported nor implemented them. The most consistent finding is the inconsistency of support for and execution of accelerative practices. This is likely a reflection of the concerns and obstacles that impede broader acceptance and application of these practices. Only correspondence courses were *allowed* in 100% of the school districts that responded from seven provinces and two territories and even this practice was implemented in only 77.2% of responding school districts. Nationwide, the remaining participation rates ranged from zero for multi-grade skipping to 62.3% for subject matter acceleration. These relatively low participation rates persist in spite of extensive research evidence of the benefits of acceleration and high-ability students eagerness for it.

The differences between permission and participation rates across Canada, and within provinces and territories provide further evidence that the confusion and controversy surrounding this practice in other countries exists in Canada as well as the US. Given the academic, social and emotional benefits to be gained by accelerants, these statistics indicate there is substantial room for growth in implementation.

Content-based accelerative options that kept highly able learners with age mates while they pursued content beyond their grade level were more popular than grade-based practices that allowed students to learn with older age mates. Grade-based forms were

more likely to be prohibited. This is consistent with Witham's (1994) and Kanevsky's (2005) findings. Content-based options are often preferred because they are less visible than placing the bright students with older learners. They also avoid concerns regarding possible negative psychosocial consequences and they create fewer administrative challenges (e.g., scheduling). Concerns related to workload may arise when implementing many content-based accelerative strategies as they place responsibility for differentiating and managing advanced curriculum on the teacher.

As in Jones & Southern's (1994) work, in this study, a school districts' size was associated with their acceleration practices, however it played a greater role in the likelihood that a student was actually accelerated in these ways than it did in whether or not a district claimed to support it. With higher enrollments, it is possible that larger districts were more likely to have had one or more strong candidates simply because they had more students.

Differences Among Jurisdictions

BC and Alberta may have smaller enrollments than Ontario & Québec, but a greater proportion of the districts in these two western provinces supported and engaged in the various forms of acceleration. BC was also the only province with a provincial policy document that we could find that specifically addressed any form of acceleration ("Earning Credit through Equivalency, Challenge, External Credentials, Post-Secondary Credit and Independent Directed Studies," BC Ministry of Education, 2004). Most provinces and territories have resource guides and handbooks that mention acceleration but explicit, formal policies could not be found (Kanevsky & Clelland, in preparation).

Québec's Dérogation 52, which permits exceptions to the age at which students begin school, was not a policy intended to promote early entrance as a form of acceleration, however it has been used for this purpose since 1987 when Drs. Bruce Shore and François Gagné,

wrote to the Ministry of Education and asked that it [Dérogation 52] be allowed to apply to come a year early as well as late (for children with medical or other problems, such as severe developmental delay). Given that the wording only stated exception, and neither early or late, we got a ruling that it could apply either way. So we let the word "out" and 50 became 5000 in 5 years. It's very normal now. The OPQ [Ordre des Psychologues du Québec] published its first guidelines in 1989 for psychologists who have to provide the documentation. Early entry (entrée précoce) is now one of the few widely available provisions in Québec... (B. Shore, personal communication, May 21, 2008).

It is possible that similar language may exist in School Acts and policies in other jurisdictions. If so, others may be inspired by the initiative undertaken in Québec. They, too, may seek to expand the interpretation of terms like "exception" when they can be found in government documents in their locations as well.

Addressing Real and Perceived Obstacles to Accelerative Options

Policy does not guarantee acceleration practices will be implemented. As mentioned earlier, BC's policy supports credit by examination for students in Grade 10 and higher but only 58.1% of districts had at least one student do this during the year. The use of

discretionary language in government documents addressing acceleration leaves the nature and extent of efforts to support and implement them in the control of local decision-makers. As in Québec, once vague or discretionary language is located, previously unrecognized opportunities may be provided for students in need of these experiences.

Numerous studies have indicated negative attitudes interfere with implementation in the U.S. (e.g., Jones & Southern, 1992; Howley, 2002). It is considered by some to be a radical intervention, “viewed as a treatment of last resort” (Jones & Southern, 1992, p.35). Howley (2002) suggested one or more of four reasons contribute to this aversion with respect to grade skipping:

(a) concern that students’ emotional development will suffer; (b) belief that acceleration will disrupt the orderly sequence of curriculum delivery; (c) fear that large numbers of parents will request that their children be accelerated; and (d) concern that acceleration will cause insurmountable scheduling problems. These concerns are not unfounded; many teachers and school administrators have had experiences that make them doubt the wisdom of acceleration. Nevertheless, upon review, their experiences almost always turn out to involve isolated cases of students who were accelerated without the support of an officially sanctioned program. (p. 158)

Regardless of their sources, these concerns cannot be dismissed. They pose very real obstacles to increasing access to many accelerative options. As discussed earlier, past and recent research evidence can be offered to respond to concerns regarding the emotional and social development of accelerants (e.g., Kulik & Kulik, 1984a, 1984b; Robinson, 2004; Rogers, 1991; Steenbergen-Hu & Moon, 2011). The benefits reported in this work were not limited to academic achievement; they included the development of positive, realistic self-concepts, positive attitudes toward school and healthy personal relationships.

With respect to disrupting “the orderly sequence of curriculum delivery” and “scheduling problems,” it is true that accommodating the needs of students who learn faster (or slower) creates challenges in a lock-step system built with rigid schedules. If a student completes the Grade 4 and 5 math curricula while still enrolled in Grade 3, what will her future teachers offer? Planning can and should be long-term as well as short-term. Curriculum articulation and scheduling problems are often easier to manage in elementary schools that are smaller and more flexible than most secondary schools. Many secondary schools now use computer-based scheduling systems that can accommodate anomalies. Scheduling concerns should not be made a higher priority than students’ needs. The rapid pace of high ability students’ learning will persist throughout their schooling and so will the need to modify the pace of their learning in one or more subjects. Preparation and flexibility will be essential features of increased access to all forms of acceleration. Counselors, administrators and teachers will need opportunities to learn for whom and when each form of acceleration is appropriate, as well as how to plan, implement and support them.

Consistent use and communication of a systematic process for locating good candidates for different types of acceleration can help manage the flow of parents asking for these options. Grade skipping is not the only way the rapid pace of their child’s learning, as well as other developmental needs, can be accommodated. Communicating clearly with parents regarding a standardized process for determining a student’s

suitability for grade advancement, or perhaps other options that better match his needs conveys their child's potential has been recognized and can be nurtured in different settings with different methods.

Neither cost nor a district's size need be obstacles to acceleration (Benbow & Stanley, 1996; Jones & Southern, 1992). Some forms of acceleration are relatively inexpensive to implement (e.g., single-subject acceleration, self-pacing, curriculum compacting, grade-skipping). Howley's (2002) study of a small rural school district's efforts to implement a range of options found "different approaches to acceleration were equally effective in producing achievement gains" (p. 160) in different schools. The key to their success was flexibility as it was deemed "unlikely that rural districts could develop one type of acceleration that would meet the needs of all the district's schools" (p. 160).

Online and distance learning opportunities have the potential to increase access and participation in advanced learning experiences. In the past, AP courses were only viable in communities with sufficient enrollment to justify them. Times have changed. Individual students may now take AP courses online through institutions such as the Center for Talent Development (www.ctd.northwestern.edu) (Olszewski-Kubilius & Lee, 2004). The percentages of districts participating in concurrent enrollment may also increase as more universities use distance education opportunities as a strategy for recruiting students with histories of excellence by bridging secondary and post-secondary studies for academically talented students. Some of these students may not have previously considered continuing their studies beyond high school. On-campus or online, concurrent enrollment can be a viable option for advanced studies while students are still completing high school graduation requirements.

When discussing pacing adjustments as an intervention, the options to be considered must extend beyond grade skipping. All stakeholders need to examine the potential benefits and concerns related to those best suited to the student, teacher and other stakeholders (Southern & Jones, 1992). They also need to be aware of the research-based supports and monitoring efforts that will enhance the benefits to the learners and their peers (e.g., Assouline, Colangelo, Lupkowski-Shoplik, Lipscomb & Forstadt, 2009). Gagné and Gagnier (2003) suggested advocates of acceleration should keep in mind that although years of quantitative group comparisons (accelerants vs. non-accelerants) have indicated no psychological adjustment problems can be attributed to acceleration, qualitative examinations of individual cases have kept these concerns alive. Hence the need for ongoing monitoring and support for the student and teachers involved.

Systematic procedures and supports can identify, minimize or eliminate potential academic, social and emotional difficulties during the planning process (Assouline, et al. 2009; Howley, 2002; Southern & Jones, 1992). Those prescribed in New South Wales' *Guidelines for Accelerated Progression* (New South Wales Board of Studies, 2000) or the *Iowa Acceleration Scale* (Assouline, et al., 2009) provide a framework to guide assessment, decision-making, implementation and monitoring processes. Culross, Jolly and Winkler (2010) recently updated a less extensive collection of guidelines for grade advancement originally proposed by Feldhusen, Proctor and Black (1986). All of these materials reflect their authors' efforts to increase the likelihood of success by integrating lessons learned from more than 50 years of research.

Concerns and perceived obstacles should be addressed through comprehensive planning and systematic, consistent implementation (Jones & Southern, 1992). We need a much better understanding of the reasons Canadian districts avoid accelerative options

before assuming the concerns evident in the United States are identical to those of Canadian educators and parents. It is likely a combination of these and related issues contribute to on-going resistance to implementation. They include a continuing concern for students' social and emotional development, a lack of awareness of the variety of accelerative options available, a need for professional development prior to implementation (e.g., how to compact or telescope curriculum), a lack of time for educators to prepare for the needs of all learners, educators' limited access to resources beyond grade-level, a lack of commitment to making acceleration work (e.g., providing administrative support and meeting time required for communicating with stakeholders, systematic preparation, monitoring and implementation) and valuing chronological age rather than developmental readiness as the guiding principle for organizing students for learning.

Limitations

Although the overall 44.5% response rate in this study is healthy, skepticism must be retained regarding whether or not the data is representative. It is likely that respondents represented the districts that were most actively engaged in acceleration. These findings may create an overly optimistic sense of acceleration in the Canadian context as districts less willing to accelerate students may have been less likely to contribute to a study of these practices. Additionally, the wording of the survey items required only one school within a district to allow or engage in each form of acceleration to result in a positive response to an item. As a result, the lived experience of students within some schools may not be consistent with the data. Such discrepancies generated heated discussions around the results of the first study in BC (Kanevsky, 2005). Reactions from teachers and parents who lived in some of the participating districts indicated there was some distance between what districts said they permitted and what was happening in their schools.

Conclusion

Subsequent research must be undertaken to track movement toward implementation rates that reflect the empirical evidence of the benefits of acceleration. It should also investigate the reasons that supportive districts did not implement these forms of acceleration and the reasons unsupportive districts refuse to implement. For example, why did only 32.7% of districts across Canada have one or more students graduate from high school early when 76.1% supported it? Similar discrepancies between "policy and practice" appeared for mentoring (67.5% vs. 36%), early entrance to middle or secondary school (65.5% vs. 28.5%), and skipping a single grade (64.1% vs. 29.7%). These national level inconsistencies shrink and grow by province and territory. What are the factors that contribute to districts' refusal to implement some forms of acceleration? Are they the same as those reported in the American studies? It is likely that the issues and concerns vary with each type of acceleration.

Elkind (1988) observed,

acceleration is really the wrong word here. If it were correct we would have to say that a child who was retained was "decelerated." When an intellectually gifted child is promoted one or several grades, what has been accelerated? Surely not the child's level of intellectual development - that, after all, is the reason for his or her

promotion! What has been accelerated is the child's progress through the school curriculum. But this can be looked at a different way, not so much as acceleration as tailoring. What promotion does for intellectually gifted children is to make a better fit between the child's level of intellectual development and the curriculum. (p. 2)

The success of differentiated learning experiences, including the various forms of acceleration, will depend on the nature and extent of the match between each student's characteristics and features of the experience to be offered. Acceleration is not sufficient to provide a highly able student with an optimal education. Blending one or more of these options with others and with differentiated curriculum, will offer a more comprehensive, powerful educational response "tailored" to students' extraordinary learning abilities. School districts and educators must provide opportunities for students to go deeper, as well as faster; to have access to more complex and challenging experiences than are appropriate for their age mates; to learn with students who share their passions and potentials, and to pursue their interests as well as achieving prescribed outcomes and standards.

References

- Assouline, S., Colangelo, N., Lupkowski-Shoplik, A., Lipscomb, J., & Forstadt, L. (2009). *Iowa acceleration scale, 3rd ed., Manual: A guide for whole-grade acceleration, K-8*. Scottsdale, AZ: Great Potential Press.
- Belcastro, F. P. (1998). A survey of types of gifted programs offered in Iowa Public School Districts (ERIC Document No. ED 432 110). Iowa: University of Dubuque.
- Benbow, C. P., & Stanley, J. (1996). Inequity in equity: How "Equity" can lead to inequity for high-potential students. *Psychology, Public Policy, and Law*, 2(2), 249-292.
- Bleske-Rechek, A., Lubinski, D., & Benbow, C. P. (2004). Meeting the educational needs of special populations: Advanced Placement's role in developing exceptional human capital. *Psychological Science*, 15(4), 217-224.
- Borland, J. H. (1989). *Planning and implementing programs for the gifted*. New York: Teachers College Press.
- British Columbia Ministry of Education. (2004). *Policy document: Earning credit through equivalency, challenge, external credentials, post-secondary credit and independent directed studies*. Victoria, BC: British Columbia Ministry of Education.
http://www.bced.gov.bc.ca/policy/policies/earning_credit_through.htm
- Canadian Education Association (2006). *2006 KI-ES-KI handbook – Directory of key contacts in Canadian education*. Toronto, ON: Canadian Education Association.
- Colangelo, N., Assouline, S.G., & Gross, M.U.M. (2004a). *A nation deceived: How schools hold back America's brightest students* (Volume I). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Colangelo, N., Assouline, S.G., & Gross, M.U.M. (2004b). *A nation deceived: How schools hold back America's brightest students* (Volume II). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Culross, R., Jolly, J., & Winkler, D. (2010). Facilitating grade acceleration: Revisiting the wisdom of John Feldhusen. Paper presented at the *Wallace Research Symposium on Talent Development*. Iowa City, IA.
- Elkind, D. (1988). Acceleration. *Young Children*, 43(4), 2.
- Feldhusen, J. F., Proctor, T. B., & Black, K.N. (1986). Guidelines for grade advancement of precocious children. *Roeper Review*, 9(1), 25-27.
- Frasier, M., & Passow, A. H. (1994). *Toward a new paradigm for identifying talent potential* (Research Monograph 94112). Storrs, CT: University of Connecticut, National Research Center on the Gifted and Talented.
- Gagné, F., & Gagnier, N. (2003). The socio-affective and academic impact of early entrance to school. *Roeper Review*, 26(3), 128-138.

- Gross, M. U. M. (2006). Exceptionally gifted children: Long-term outcomes of academic acceleration and non-acceleration. *Journal for the Education of the Gifted*, 29(4), 404-429.
- Hertberg-Davis, H., Callahan, C. M., & Kyburg, R. M. (2006). *Advanced Placement and International Baccalaureate programs: A "fit" for gifted learners?* (No. RM06222). Storrs, CT: National Research Center on the Gifted and Talented.
- Hoekman, K., McCormick, J., & Gross, M. U. M. (1999). The optimal context for gifted students: A preliminary exploration of motivational and affective considerations. *Gifted Child Quarterly*, 43(3), 170-193.
- Howley, A. (2002). The progress of gifted students in a rural district that emphasized acceleration strategies. *Roeper Review*, 24(3), 158-160.
- Jones, E. D., & Southern, W. T. (1992). Programming, grouping, and acceleration in rural school districts: A survey of attitudes and practices. *Gifted Child Quarterly*, 36(2), 112-117.
- Kanevsky, L. S. (1990). Pursuing qualitative differences in the flexible use of a problem-solving strategy by young children. *Journal for the Education of the Gifted*, 13(2), 115-140.
- Kanevsky, L. S. (1992). The learning game. In P. S. Klein & A. J. Tannenbaum (Eds.), *To be young and gifted* (pp. 204-241). Norwood, NJ: Ablex.
- Kanevsky, L. S. (2005). Acceleration practices in BC. Paper presented at Lower Mainland Gifted Contacts' Conference, "Acceleration is More Than Grade-Skipping". Coquitlam, BC.
- Kanevsky, L. S. (in press). Deferential differentiation: What types of differentiation do students want? *Gifted Child Quarterly*.
- Kanevsky, L. S., & Clelland, D. (in preparation). Acceleration in Canada: Policies and predicaments.
- Kanevsky, L., & McGrimmond, L. (2008, June). *Acceleration in Canada*. Paper presented at the annual meeting of the Canadian Society for Studies in Education, Vancouver, BC.
- Kulik, J. A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives*. Storrs, CT: The National Research Center on the Gifted and Talented, Research Monograph No. 93106.
- Kulik, J. A., & Kulik, C. C. (1984a). Synthesis of research on effects of accelerated instruction. *Educational Leadership*, 42(2), 84-89.
- Kulik, J., & Kulik, C. (1984b). Effects of accelerated instruction on students. *Review of Educational Research*, 54(3), 409.
- Lee, S.-Y., Olszewski-Kubilus, P., & Peternel, G. (2010). The efficacy of academic acceleration for gifted minority students. *Gifted Child Quarterly*, 54(3), 189-208.

- Lohman, D., & Marron, M. (2008). Studying acceleration with national datasets and surveys: Some suggestions, some results and our experiences. *Gifted Children*, 2(2), 3-8.
- Lubinski, D., & Benbow, C. P. (2000). States of excellence. *American Psychologist*, 55, 137-150.
- New South Wales Board of Studies. (2000). Guidelines for accelerated progression: Board of Studies NSW, Sydney, Australia. <http://www.boardofstudies.nsw.edu.au/manuals/>
- Olszewski-Kubilius, P., & Lee, S.-Y. (2004). Gifted adolescents' talent development through distance learning. *Journal for the Education of the Gifted*, 28(1), 7-35.
- Peters, S. J., & Mann, R. L. (2009). Getting ahead: Current secondary and postsecondary acceleration options for high-ability students in Indiana. *Journal of Advanced Academics*, 20(4), 630-660.
- Plucker, J. A., Robinson, N. M., Greenspon, T. S., Feldhusen, J. F., McCoach, B., & Subotnik, R. R. (1999). It's not how the pond makes you feel, but rather how high you can jump. *American Psychologist*, 59, 268-269.
- Pressey, S. L. (1949). *Educational acceleration: Appraisal of basic problems*. Bureau of Educational Research Monographs, No. 31. Columbus, OH: Ohio State University Press.
- Rawlins, P. (2004). Students' perceptions of their experiences from within acceleration programs in mathematics. *Australian Senior Mathematics Journal*, 18(1), 42-51.
- Rimm, S. B., & Lovance, K. J. (1992). The use of subject and grade skipping for the prevention and reversal of underachievement. *Gifted Child Quarterly*, 36(2), 100-105.
- Robinson, N. M. (2004). The effects of academic acceleration on the social-emotional status of gifted students. In N. Colangelo, S. Assouline & M. U. M. Gross (Eds.), *A nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 59-67). Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
- Rogers, K. B. (1986). Do the gifted think and learn differently? A review of recent research and its implications for instruction. *Journal for the Education of the Gifted*, 10(1), 17-39.
- Rogers, K. (1991, October 1). *The relationship of grouping practices to the education of the gifted and talented learner: Research-based decision making series*. (ERIC Document Reproduction Service No. ED343329).
- Rogers, K. B. (2007). Lessons learned about educating the gifted and talented: A synthesis of the research on educational practice. *Gifted Child Quarterly*, 51(4), 382-396.
- Sayler, M. F., & Brookshire, W. K. (1993). Social, emotional, and behavioral adjustment of accelerated students, students in gifted classes, and regular students in eighth grade. *Gifted Child Quarterly*, 37(4), 150-154.

- Southern, W. T., & Jones, E. D. (2004). Types of acceleration: Directions and issues. In N. Colangelo, S. Assouline & M. U. M. Gross (Eds.), *Nation deceived: How schools hold back America's brightest students* (Vol. II, pp. 5-12). Iowa City, IA: Connie Bellin & Jacqueline Blank International Center for Gifted Education and Talent Development.
- Southern, W. T., & Jones, E. D. (1992). The real problems with academic acceleration. *GCT, 15*(2), 34-38.
- Southern, W. T., & Jones, E. D. (Eds.). (1991). *The academic acceleration of gifted children*. New York NY: Teachers College Press.
- Stanley, J. C. (2000). Helping students learn only what they don't already know. *Psychology, Public Policy, and Law, 6*, 216-222.
- Steenbergen-Hu, S., & Moon, S. M. (2011). The effects of acceleration on high-ability learners: A meta-analysis. *Gifted Child Quarterly, 55*(1), 39-53.
- Swiatek, M. A. (1994). Accelerated students' self-esteem and self-perceived personality characteristics: A five-year longitudinal study. *Journal of Secondary Gifted Education, 5*(4), 35-41.
- Van Tassel-Baska, J. (2010). An introduction to the Integrated Curriculum Model. In J. Van Tassel-Baska & C. A. Little (Eds.), *Content-based curriculum for high ability learners* (pp. 9-32). Waco, TX: Prufrock Press.
- Wells, R., Lohman, D., & Marron, M. (2009). What factors are associated with grade acceleration? An analysis and comparison of two U.S. databases. *Journal of Advanced Academics, 20*(2), 248-273.
- Witham, J. H. (1994). Acceleration: Does it happen more frequently for gifted students in private or public schools? Annual Meeting of the American Educational Research Association. New Orleans, LA.
- Work Group on Acceleration. (2009). *Guidelines for developing an academic acceleration policy*. Iowa City, IA: Institute for Research and Policy on Acceleration, University of Iowa.
- Zeidner, M., & Schleyer, E. J. (1999). The big-fish-little-pond effect for academic self-concept, test anxiety, and school grades in gifted children. *Contemporary Educational Psychology, 24*, 305-329.

Appendix

Forms of Acceleration

Note: Based on Southern & Jones (2004) and Work Group on Acceleration (2009)

Content-based

Advanced Placement: The student takes a course (traditionally in high school) that results in post-secondary credit upon completion of a standardized AP examination with a score acceptable to the college or university.

Concurrent or Dual Enrollment: The student is enrolled in one level but takes a course or courses at a higher level. Examples include taking calculus at the university level and receiving university credit for it upon successful completion while still enrolled in high school, or taking a high school course in Chemistry while still enrolled in junior high school.

Correspondence Courses: A student enrolls in advanced coursework outside of normal school instruction. Instruction may be delivered by mail, Internet-based instruction and/or television.

Credit by Examination: The student is awarded advanced standing (e.g., high school or college) by successfully completing some form of mastery test or activity. This is also known as “course challenge” or “testing out.”

Curriculum Compacting: Based on high levels of mastery demonstrated on a pre-assessment, the amounts of introductory activities, drill, and practice are reduced for one or more students in a class. The time gained may be used for more advanced content instruction or to participate in enrichment activities. Curriculum compacting does not necessarily result in advanced grade placement.

Extra-curricular Programs: A student enrolls in coursework after school, on weekends or summer programs that offer advanced instruction and/or credit.

International Baccalaureate Programs: Students complete advanced interdisciplinary curriculum prescribed by the International Baccalaureate Organization. At the end of high school, students take an international examination and may receive advanced standing in their post-secondary studies.

Mentoring: A student is paired with a mentor or expert tutor who provides advanced or more rapidly paced instruction.

Subject-Matter, Single Subject or Partial) Acceleration: A student is placed in classes with older peers for a part of the day OR works with materials from higher grade placements in one or more content areas. Subject-matter acceleration may also take place outside of the general instructional schedule (e.g., summer school or after school), or by using higher-level instructional activities on a continuous progress basis without leaving the placement with chronological-age peers.

Grade-based

Combined Classes: Students in two or more consecutive grades are enrolled in one class. While not, in and of itself, a practice designed for acceleration, in some instances (e.g., a fourth and fifth-grade combined class), this placement can allow younger students to interact academically and socially with older peers. It may or may not result in an advanced grade placement later.

Continuous Progress: A student is given content progressively as prior content is mastered. The practice is accelerative when the student's progress exceeds the performance of chronological peers in rate and level.

Early Entrance into Middle School or Secondary School: A student is moved in to the next level of a subject or schooling at least one year ahead of chronological-age peers at the end of elementary, middle or junior secondary school. This may involve dual enrollment and/or credit by examination.

Early Entrance to First Grade: This can result from either skipping kindergarten or from accelerating a student from kindergarten into Grade 1 during what would be the student's first year of school.

Early Entrance to Kindergarten: Students enter kindergarten prior to achieving the minimum age for school entry as set by the Ministry of Education.

Early High School Graduation: A student graduates from high school in 3½ years or less. Generally, this is accomplished by increasing the amount of coursework taken each year in high school but it may also be accomplished through concurrent or dual enrollment in college or university, or through extracurricular or correspondence coursework.

Grade Skipping: A student is considered to have skipped one or more grades if he or she is given a grade-level placement ahead of chronological-age peers at anytime during the year.

Self-Paced Instruction: Self-paced instruction is a sub-type of continuous progress acceleration. In self-paced instruction the student has control over pacing decisions.

Telescoping Curriculum: A student is provided instruction in less time than is normal (e. g., completing a one year course in one semester, or three years of middle school in two). Telescoping differs from curriculum compacting in that time saved from telescoping in two ways: it is planned to fit a precise time schedule and it always results in advanced grade placement.