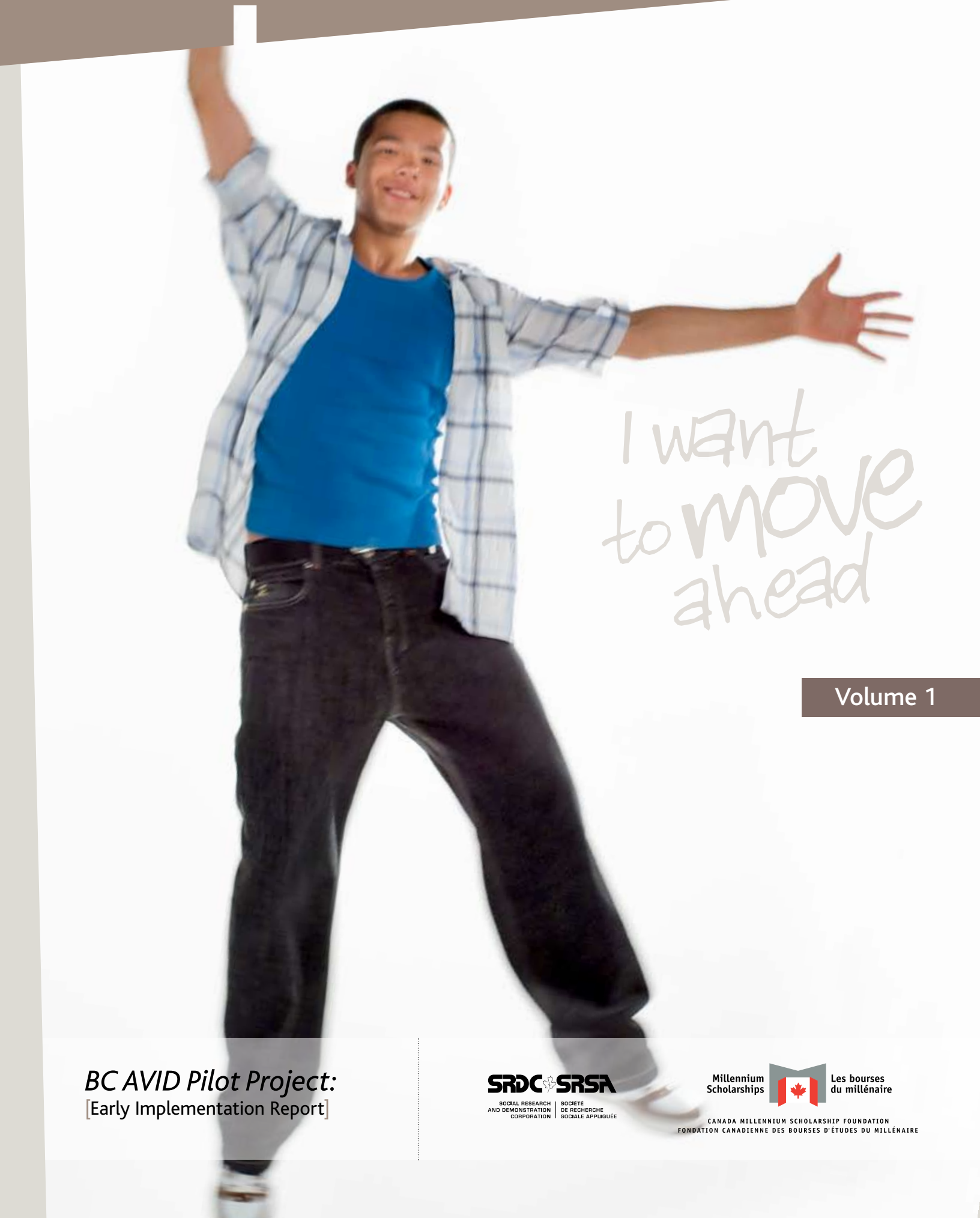

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Volume 1

BC AVID Pilot Project:
[Early Implementation Report]

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The British Columbia Advancement Via Individual Determination (BC AVID) Pilot Project is the result of collaboration among a large number of organizations and individuals. The present report would not have been possible without the commitment and high-calibre work of the many different partners who have designed and delivered the interventions and collected the data.

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Highlights

LThe British Columbia Advancement Via Individual Determination (BC AVID) Pilot Project's purpose is to test whether the AVID elective, when offered to middle-achieving students in BC high schools, increases access to post-secondary education among these students. The present report describes the rationale for the project, the structure of the AVID program and the organizational steps needed to deliver the program in tandem with its rigorous evaluation across 18 sites in BC. Each stage of early implementation—from recruitment and selection through to the completion of delivery of the Grade 9 AVID program for two cohorts of students—is described, drawing on evidence from parent and student surveys, interviews with educators, observations of recruitment and classroom activities, as well as student, tutor and class activities data collected during recruitment and program delivery.

Recruitment and selection seems to have followed the procedures set out for the project, with only minor deviations, resulting in 1,522 project participants successfully allocated to the project's experimental groups. While 901 were offered a place in a program group that was offered a place in the AVID program, 454 were allocated to a comparison group that was not offered a place. It is from comparisons of the long-term educational experiences of these two groups that the impact of the AVID offer will be estimated.

Educators varied in their assessment of how well the recruited students matched the profile of those expected to benefit from the AVID program. In particular, some educators questioned the individual determination of their AVID students. Aggregate analysis of the characteristics of students and their family backgrounds, however, suggested that the project sample was broadly in line with the academic profile of AVID-suitable students. The match to expectations in terms of the socio-economic profile of AVID students was less strong, with no over-representation of students from lower income families or an Aboriginal background.

In preparing to deliver the Grade 9 program, AVID teachers benefited from training, program resource guides and a curriculum provided by the AVID Center, all of which they perceived as very helpful. In practice, different teachers drew on a variety of AVID activities and resources in implementing AVID curriculum classes. Delivering the program has proven a challenge for several reasons, including scheduling difficulties and problems establishing tutorial classes. Several sites experienced difficulties recruiting and maintaining suitable tutors for these classes. More success has been seen with provision of the motivational components of the AVID program, including team-building activities, special presentations and field trips. Overall, nearly 90 percent of AVID students received a minimum of 81 hours of AVID activities during their first year. These activities were not apportioned as expected: students spent considerably less time in tutorial classes and more time in curriculum classes than predicted by the AVID model.

Despite the challenges of establishing a complex program like AVID in 18 sites simultaneously, extensive efforts by BC educators to deliver the program as intended have established a valid framework for evaluating the AVID program's impacts on post-secondary enrolment. Although there appear to be shortfalls in some aspects of implementation, when compared against the AVID model, the actual levels of exposure to AVID components required to improve students' post-secondary outcomes are not firmly established. Students are only one-quarter of their way through four years of the AVID program, so it will be left to later reports to draw firm conclusions about whether the project has given the program a fair test, along with estimates of the impacts of what has been delivered and an assessment of the cost-effectiveness of doing so.

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The BC AVID Pilot Project

Introduction

The British Columbia Advancement Via Individual Determination (BC AVID) Pilot Project is part of a series of Millennium Pilot Projects that attempt to find out what works to increase access to post-secondary education. It was established by the Canada Millennium Scholarship Foundation, working in partnership with the BC Ministry of Education, to test a U.S. college-preparatory program only recently introduced to Canada[1] that could meet that aim.

The present report is intended for education researchers and practitioners, as well as policy-makers who are concerned with increasing access to post-secondary education for those young Canadians who are currently under-represented in the post-secondary system.

This report describes the implementation of the BC AVID Pilot Project, a demonstration project testing a BC version of the college-preparatory program called AVID, initially pioneered in the U.S. in the early 1980s. AVID is designed to help middle-achieving students in high school, who have academic potential but are under-represented in post-secondary education, to access their chosen post-secondary education program. Providing an account of the project's initial implementation, the present report can be of value to those interested in replicating BC AVID, and it is intended to establish a useful context for interpreting the research findings as they unfold.

The present chapter provides the rationale for running a demonstration project to evaluate AVID in BC. Given that AVID already operates in more than 3,500 schools in the U.S., the intervention being tested in this project is labelled BC AVID for the sake of clarity. It is important to note that the evaluation is tasked with determining the impact of the AVID elective on middle-achieving students in BC, rather than its potential school-wide impacts. Text Box 1.1 provides the main project names used throughout the present report.

The chapter begins with a brief discussion of achievement barriers to post-secondary education and how BC AVID might help to reduce such barriers in Canada. The structure of the BC AVID Pilot Project is presented next, including its random assignment design. The subsequent section summarizes the timeline of the BC AVID Pilot Project and provides a short account of the efforts made to reduce potential threats to the validity of the research findings. The chapter concludes with a review of the contents of the remainder of the report.

1 In 2001, a two-school **AVID** program began in the Chilliwack School District, separate from the launch of the **BC AVID Pilot Project**, which occurred in 2004; by September 2005, the first **BC AVID** electives were underway.

Text Box 1.1: Project Terminology

AVID—An acronym for Advancement Via Individual Determination, the U.S. college-preparatory program that is overseen by the AVID Center, a San Diego-based non-profit organization established in 1992 to promote the AVID program (see Text Box 1.2).

BC AVID—BC AVID is the name given to the intervention or program being tested in BC. Specifically, the intervention is the offer of a place in an AVID Classroom to students who meet specific program selection criteria and who have volunteered to join the class. Each place in the class is accompanied by support for these students' engagement in rigorous and advanced courses offered within the high school.

BC AVID Pilot Project—The BC AVID Pilot Project is the name given to the project being run in BC to test the intervention called BC AVID.

Post-secondary education—For the purposes of the BC AVID Pilot Project, post-secondary education is taken to mean Canada Student Loans-recognized programs operating at universities, community colleges or private vocational institutions and as apprenticeships. This definition does not necessarily match other post-secondary education definitions employed by the research cited in the present report or by the AVID Center itself. Where differences occur, further clarification will be provided.

CHAPTER SUMMARY

- **The BC AVID intervention aspires to increase access to post-secondary education** for high school students who experience achievement-related barriers that prevent them from accessing post-secondary education. These barriers could include average grade performance, the completion of unsuitable courses and lack of school engagement, focus and support to excel academically. BC AVID aims to familiarize students with advanced academic study and tutorials and stimulate them through other supportive activities, with the aim of enhancing their academic proficiency and readiness to access a post-secondary education program.

- **The pilot project attempts to test BC AVID as a practical working intervention that—if found to be successful—could be used by decision-makers in education to increase access to post-secondary education.** There is evidence that the AVID program helps to prepare underachieving students to access college in the U.S. Yet it remains to be seen whether AVID will work to improve post-secondary education access in Canada and, more specifically, in a province like BC. There are differences in the educational systems and thus the applicability of a college-preparatory program that was originally developed to solve problems identified in large urban U.S. high schools could be questioned. This evaluation will learn how effective the intervention is in a Canadian context.

- **This project adopts an approach that creates a statistically equivalent counterfactual—through random assignment—against which outcomes can be carefully compared.** The AVID program is strongly selective in terms of who should receive it.[2] Any rigorous evaluation of the impact of AVID is therefore required to control effectively for this selection.

- **The research design of the BC AVID Pilot Project consists of an impact study, implementation research and cost–benefit analysis.** Several steps are involved in setting up the BC AVID Pilot Project, including the identification and recruitment of schools, training of school staff, identification and recruitment of students and collection of data from a range of sources. Considerable information from implementation research, including a longitudinal panel study, will be required in order to understand the program's impacts completely. Two long-term impacts are of particular interest to the BC AVID Pilot Project: (1) enrolment in post-secondary education, and (2) completion of the first year of a post-secondary education program.

- **The BC AVID Pilot Project attempted to standardize BC AVID's implementation across the participating schools in order to reduce any potential threats to validity.** Careful training and oversight and monitoring of the implementation of the BC AVID intervention will help both to ensure a better understanding of the program delivered and to minimize the extent of threats to validity.

ACHIEVEMENT BARRIERS TO POST-SECONDARY EDUCATION ACCESS IN CANADA

AVID is focused on helping middle-achieving students overcome barriers to their achievement in high school in order to be able to enrol in post-secondary education programs. While achievement is not the only barrier to post-secondary education faced by high school students in Canada, different barriers—such as financial and information ones—are addressed by different interventions being tested by the Canada Millennium Scholarship Foundation. A review of those barriers and piloted interventions appear in a recent report (Social Research and Demonstration Corporation, 2007). This section reviews why a pilot project focused on achievement barriers is necessary for a fuller understanding of post-secondary access in Canada.

2 Membership of the AVID elective is intended for students **academically** in the middle who have the desire to go to college and the willingness to work hard—that is, the students are capable of completing a rigorous curriculum, but are falling short of their potential. Typically, these students are first-generation scholars and from low-income or minority families (retrieved November 21, 2007, from www.avidonline.org).

According to a recent Statistics Canada report (Shaienks & Gluszynski, 2007), 79 percent of people aged 24 to 26 who participated in Cycle 4 of the *Youth in Transition Survey* had accessed college/CEGEP, university or some "other" type of post-secondary education institution. The remaining 21 percent did not access post-secondary education at all, citing reasons that included poor high school engagement and academic performance.[3] The BC AVID Pilot Project should help to determine whether a college-preparatory program could make a difference to education outcomes for those who currently do not access post-secondary education.Students face a variety of barriers to access to post-secondary education in Canada.[4] The literature suggests that in addition to more well-reported barriers, such as financial ones, academic achievement barriers are also important (Ipsos-Reid Corporation, 2001; Bowlby & McMullen, 2002; Berger, Motte, & Parkin, 2007; R. A. Malatest & Associates Ltd., 2007).[5] Academic achievement is made up of a number of important and interrelated factors, such as grade performance, courses taken, level of engagement in learning, degree of focus and pedagogic support (Hidi & Harackiewicz, 2000; Lapan, Kardash, & Turner, 2002; Marzano, 2003; McInerney, Dowson, & Yeung, 2005; R. A. Malatest & Associates Ltd., 2007; Thiessen, 2007). These factors are examined in the next section.[6]

Grade Performance

Some maintain that grade performance in high school is the strongest determinant of educational pathway (R. A. Malatest & Associates Ltd., 2007; Thiessen, 2007). In 2001, the percentage of Canadian youth aged 20 to 22 who had participated in post-secondary education varied as a function of overall grades in high school (Lambert, Zeman, Allen, & Bussière, 2004).[7] For example, 88 percent of those who received grades of 80 percent or better participated in post-secondary education—mainly university—versus 21 percent of those whose grades were below 60 percent. Of those in the latter group who participated in post-secondary education, many went to college/CEGEP. More recently, *The Class of 2003* study found a strong relationship between grade performance and type of post-secondary education program pursued (R. A. Malatest & Associates Ltd., 2007). The study revealed that university students were three times more likely than college students to have achieved 80 to 100 percent overall in high school, whereas apprentices were six times more likely than university students to have performed below a B average in high school. Middle-achieving students with grades below 70 percent in high school—in particular, in Grade 12—can face diminished access to post-secondary education, given the existing minimum admissions requirements for the various programs within Canada and beyond.

Courses Taken

Students' post-secondary pathways are influenced not only by their overall grades in high school but also by the degree of difficulty and types of courses they take (Thiessen, 2007). For a variety of reasons, some high school students may not perform as well as they are able; such a situation can persist over time or students could opt for less demanding courses in later years (Peterson & Colangelo, 1996).[8] It is widely recognized that high school students are placed into lower tracks on the basis of past achievement, and according to Carbonara (2005), students who take easier courses tend to exert less effort and experience fewer gains in learning. One possible explanation is that students who are placed in higher tracks are expected to learn more, so they do.[9] Other students could be advised—e.g. by a school counsellor, teacher, family member or friend—to take electives that are unsuitable for the post-secondary education and vocation they later decide to pursue (Eccles, Vida, & Barber, 2004). Whatever the reason, students who do not take certain courses during high school may not meet the academic eligibility requirements for their preferred post-secondary education program or stream and for post-secondary education in general (R. A. Malatest & Associates Ltd., 2007).

Academic Engagement, Focus and Support

Many students do not follow specific learning pathways due to lack of interest (Brophy, 2004; Carbonara, 2005; Otis, Grouzet, & Pelletier, 2005) and lack of focus (Bowlby & McMullen, 2002; Berger et al., 2007). Recent research suggests that when taken together, these could be more influential than financial barriers to post-secondary education (R. A. Malatest & Associates Ltd., 2007). Findings from *The Class of 2003* study revealed that 13 percent of students reported lack of interest and 31 percent mentioned lack of a career focus, while 38 percent reported at least one or the other. In comparison, 33 percent cited financial barriers as a reason for not pursuing post-secondary education (R. A. Malatest & Associates Ltd., 2007). Students who do not feel appropriately supported in high school could be at risk of becoming disengaged from learning (Miller, 2000; Reeve & Yang, 2006).[10] Furthermore, students who are not engaged in school and classroom learning activities could exert little effort, experience decrea sed grade performance and lack focus (Board on Children, Youth and Families, 2003; Carbonara, 2005). Academic engagement and focus, as well as support factors, can affect the ways in which students think about and embark upon various career education activities throughout high school (Witko, Bernes, Magnusson and Bardick, 2005), which in turn can have an impact on their post-secondary endeavours. According to some students, classrooms that incorporate a stimulating curriculum with high expectations, promote

3 Data used in the present report came from the first four cycles of the *Youth in Transition Survey* and described where participants were positioned in their school-to-work pathway as of December 2005.
4 Please see Social Research and Demonstration Corporation (2007) for a more thorough review of barriers to post-secondary education access.
5 Here, the focus of the discussion is on high school students who demonstrate a discrepancy between expected and actual achievement that is not the direct effect of a diagnosed learning disability and that also persists over a continuous period of time. This situation is described in the literature as "underachievement" (Robinson, 2006).
6 Disentangling the associations found in the literature between these and other variables is complex and lies outside the scope of the present report. This section considers only the key elements of students' academic underachievement that AVID aims to modify.
7 This study used data from the *Youth in Transition Survey* (Cohort B) provided in both 2000 and 2002 on educational activities and status; post-secondary education included college/CEGEP, university and other post-secondary institutions.
8 Scholastic underachievement is, by and large, believed to first appear at the junior high/middle school level, thereafter increasing through high school (Peterson & Colangelo, 1996).
9 The academic tracking issue is much debated in the literature and goes beyond the extent of the present report. See Oakes, Selvin, Karoly & Guiton (1992) and Carbonara (2005) for further information on this topic.
10 Academic engagement has been defined in the literature as interest in, effort, enthusiasm about or attachment to school or the learning process (Carbonara, 2005).

Text Box 1.2: What Is AVID?

Advancement Via Individual Determination or AVID has been identified as a promising program that could help ethnic minority students overcome achievement barriers to post-secondary education access (Fashola & Slavin, 1997; Gandara, Larson, Mehan, & Rumberger, 1998; Mehan, Villanueva, Hubbard, & Lintz, 1996; Montecel, Cortez, & Cortez, 2004; Watt, Powell, & Mendiola, 2004).

AVID is intended for those who are academically in the middle and who are keen to go to college. An underlying assumption of AVID is that students in the program are able to cope with a demanding set of courses but have previously not been achieving to their highest academic potential. Accordingly, the instruction they receive under the AVID program is deliberately accelerated; students register in their school's most challenging core curriculum and in an AVID elective wherein they "learn organizational and study skills [and] work on critical thinking and asking probing questions." AVID students receive academic support from an AVID teacher who works directly with school staff to implement the AVID program and later from counsellors who guide them through the college application process. They also participate in tutorials and other enrichment and motivational activities. They have the chance to go on field visits to local businesses and to take college tours to broaden their career education awareness (Chapter 2 provides a comprehensive overview of the AVID program, as well as a description of AVID in the BC AVID Pilot Project).

According to the AVID paradigm, introducing underachieving students to advanced academics and motivating those students through tutorials and additional activities will improve their access to college. Little is known, however, about how a program like AVID might fare in Canada, and more specifically, in a Canadian province like BC due to differences in the educational system and thus the applicability of a college-preparatory program that was originally developed to solve problems identified in large urban U.S. high schools.

A great deal should be learned from a demonstration project that applies an existing, well-designed model recalibrated for the BC context, for several reasons: (1) policy-makers are interested in improving access to post-secondary education for young Canadians struggling with an assortment of access barriers; (2) independent research has found AVID to be an effective program for enhancing advanced-level classroom enrolments and college access in the U.S. (Montecel et al., 2004); and (3) little solid evidence exists to support the efficacy of a Canadian-based AVID program.

Source: AVID Center (2007).

interactive learning and foster positive relationships among students and teachers could be the most transformative in terms of facilitating scholastic engagement and readiness for life beyond high school (Lee, 1999).

The next section provides the rationale for conducting an evaluation of a program designed to increase access to post-secondary education for high school students in Canada who could well be struggling with the types of achievement barriers just considered.

THE RATIONALE FOR A DEMONSTRATION PROJECT

Demonstration projects are often carried out to improve the quality of evidence about what works to tackle social policy problems. Such projects often use random assignment experimental designs, which are considered the gold standard in program evaluation. When properly implemented, social experiments provide internally valid estimates of program impacts; accordingly, unbiased estimates of the impacts on specific outcomes of offering a specific program to a program group at a particular time and place can be established (Burtless, 1995; Gueron, 2000). With a random assignment design, individuals in program and comparison groups come from the same target population. Because chance is the only determinant of group assignment, there will be no systematic differences between the groups aside from the offer of the intervention.[11] As a result, the groups will be equally likely to experience external events that are unrelated to the program being tested. For this reason, a valid estimate of the impacts of the program is provided by the differences in outcomes (e.g. in the proportion of students enrolling in post-secondary education) between the groups—with the proviso that the experiment has been properly maintained over time (Cook, 2003).

The BC AVID Pilot Project is especially focused on the impact of offering the AVID Elective to students who are identified as middle achieving in Grade 8. The program group are students selected to receive the program intervention—i.e. being offered a place in the class and receiving accompanying support to engage in rigorous and advanced courses offered within the high school, as described in Text Box 1.2.

11 Even with random assignment, chance differences do sometimes occur between the groups being compared, although researchers agree that the differences represent errors in precision rather than bias (Mohr, 1995; Orr, 1999). To correct for such errors, data on the characteristics of the sample can be collected before random assignment, so that they can be used in regression models to improve the precision of outcome estimates.

At present, there is a paucity of experiments in education evaluation (Cook, 2003). The BC AVID Pilot Project is the first of its kind to test the impact and cost-effectiveness of an intervention modelled after a U.S. program in Canada and to demonstrate its effectiveness relative to a same-school comparison group not targeted to receive new services. It aspires to pilot BC AVID as a practical working intervention that—if found useful—can be utilized by decision-makers in education to increase access to community colleges, apprenticeships, private vocational institutions and universities.[12]

An objective of the BC AVID Pilot Project is to determine whether AVID can be applied effectively in a Canadian context. The BC AVID Pilot Project aimed to implement the AVID program within parameters acceptable to the program's developers at the AVID Center. Still, minor program adjustments were necessitated by the educational context in BC, as well as the broad objectives of the Canada Millennium Scholarship Foundation's research.

For example, there are currently more than 250 accredited private post-secondary institutions in BC that offer a wide range of educational options to high school students. Nevertheless, most of those students enrol in one of BC's publicly funded institutions, such as a traditional university, specialized university, university-college, college or provincial or Aboriginal institute. BC has one of the most integrated public post-secondary education systems in Canada, with elaborate credit transfer arrangements that allow students to move easily from one institution to another. For this reason, the BC AVID Pilot Project will consider access to one of the four streams of post-secondary education as a successful outcome, rather than only access to a four-year university program, which is conventionally deemed a successful outcome for the U.S. AVID model. Additional modifications to the program are outlined in Chapters 2 to 4.

The basic structure of the BC AVID Pilot Project is summarized below. A list of the main constituents of the project is then offered.

STRUCTURE OF BC AVID PILOT PROJECT RESEARCH

Regardless of where it is implemented, the AVID program has strongly defined parameters in terms of who should be selected to enter the elective. As a consequence, any rigorous evaluation of the impact of AVID is required to control effectively for that selection. This calls for an approach that creates a statistically equivalent counterfactual, such as through random assignment, against which outcomes can be carefully compared. Cook (2003, p. 115) states: "Design-wise, the randomized experiment is widely known as the best tool for attributing observed student change to whatever classroom or school option is under consideration as a possible cause of the observed change."

A social experiment with random assignment of students is the major evaluation method used for the BC AVID Pilot Project[13]. The preferred random assignment approach for the project is the single treatment design, wherein the program group will receive BC AVID and the comparison group will not. The impact of BC AVID will then be evaluated by comparing the average outcomes of the BC AVID program and BC AVID comparison groups.

The basic structure of the BC AVID Pilot Project consists of an impact study, implementation research and cost–benefit analysis, described below.

Impact Study

The impact study is intended to collect evidence of BC AVID's effectiveness from Grade 9 through to the start of the second year of a post-secondary education program by means of surveys and administrative records. Two major long-term impacts are of particular interest in the BC AVID Pilot Project: (1) successful enrolment in post-secondary education, and (2) successful completion of the first year of a chosen post-secondary education program.

BC AVID could contribute additionally to the second impact, because students who successfully enrol in a post-secondary education program and who have been equipped with BC AVID learning strategies might demonstrate a greater readiness to undertake more advanced studies and to persist in those advanced studies toward the completion of a preferred post-secondary education program. Impacts on long-term outcomes, such as post-secondary education persistence into the second and later years of chosen programs, completion of those programs and certification, will not be observed under the current research. Similarly, subsequent labour market participation outcomes are beyond the scope of the present project. Further details on the expected short-term, interim and long-term impacts of the project are provided in Chapter 8.

12 It was decided early on in the development of the **BC AVID** Pilot Project that it would measure students' completion of the first year of a Canada Student Loans-recognized post-secondary education program, rather than students' full completion of the program, owing to the Foundation's mandate to be in operation only until 2010.

13 Although student assignment is random, the students eligible for assignment and the schools they attend will not have been selected at random. Both will have been selected, in part, based on their willingness to participate in the project (in line with AVID guidelines), which has a bearing on how final impact results can be interpreted.

Implementation Research

Implementation research is an important complement to the impact analysis. It provides context and contributes to the plausibility of the evaluation. Specific implementation research objectives for the BC AVID Pilot Project include the following:[14]

- **determining** whether BC AVID has had a fair test in a real-world setting;
- **determining** whether the delivery of BC AVID was consistent across sites and over time;
- **documenting** the operation of the BC AVID Pilot Project to provide an account of the activities undertaken;
- **interpreting** the black box findings produced by the impact analysis;[15] and
- **profiling** the educational and socio-economic environments within which the BC AVID intervention is operating.

BC AVID's implementation research uses quantitative and qualitative data to answer a number of implementation research questions related to each of the objectives just listed. The BC Ministry of Education contracted the Chilliwack School District to be the first point of contact for BC AVID site implementation issues and to provide operational support in the delivery of BC AVID, owing to the district's existing AVID program.

For the BC AVID Pilot Project, four schools in rural areas with smaller Grade 8 student populations were identified as case study sites to contribute to the project's evaluation, mainly through implementation research. A main goal of the inclusion of the case study sites is to determine how well the four schools, which are smaller and located in more remote, rural parts of the province, manage the challenges of implementing the BC AVID intervention in such settings, given that AVID was originally designed for much larger city schools in the U.S. Due to their size, random assignment was not planned for these four case study sites, so they will not contribute to the project's impact analysis. Further information on the recruitment of the case study sites and of students at the sites is provided in Chapters 3 and 4.

The data used in the present report relate to early implementation of the BC AVID Pilot Project. These cover the period from the start of the project to the completion of Grade 9 AVID. Although data collection continues for use in later reports, the current report only uses information relating to the period up to the end of June 2006 for project participants in Cohort 1 and to the end of June 2007 for those in Cohort 2, when each respective program group would be due to have completed Grade 9 AVID. Text Box 1.3 reviews the sources of data used to report on this early implementation period, which spans project organization, recruitment and selection of participants and the first year of program delivery for each cohort of participants.

Cost–Benefit Analysis

Implementing AVID costs money for training, site fees, AVID resources (including an AVID library), tutor payments and bursaries and ties up staff time and resources. It requires a long-term commitment to bearing these costs before the results will be realized. However, should BC AVID be successful at increasing enrolment and completion rates of the first year of a chosen post-secondary education program, its beneficial effects could readily outlast the project.

Given that significant resources need to be spent on the intervention, it is important that a social cost–benefit analysis be undertaken. Those considering whether BC AVID should be widely adopted will need to know if it is cost-efficient—in terms of both monetary and non-monetary benefits and costs. Even though a cost–benefit analysis itself cannot happen until final data are available, steps will be taken early on to ensure that arrangements are made to collect data that will eventually be required for the analysis.

A more complete description of the cost–benefit analysis that is planned for the BC AVID Pilot Project is provided in Chapter 8. The following section gives an overview of planned research.

14 It should be emphasized that while the implementation research objectives are typically fixed from the start of an evaluation, the implementation research data collection plans are deliberately flexible in order to respond to specific data needs that invariably arise as implementation of a project progresses.

15 Interpretation of black box findings through implementation research here is taken to mean the careful study of the delivery of **BC AVID**, including evaluating how well the intervention was implemented and investigating any associations between the intervention and outcomes. Consideration is also given to the influence of factors outside of the delivery of BC AVID. Such interpretations can provide grounds for modifying the intervention before more widespread introduction and can change how people think about such an intervention.

Text Box 1.3: Sources of Data Used in the Present Report

Baseline survey of project participants and their parents—Grade 8 students completed a paper questionnaire as part of the application process in 2005–06. The survey asked about their educational experiences, employment experiences and peers. Those students who were subsequently found eligible for AVID (and became members of the program group, the comparison group or who in some cases were placed on a waiting list) are termed "project participants." The parents of project participants were also subject to a telephone survey on household characteristics. The survey data for project participants and their parents are used to assess student characteristics in Chapter 5 and for subgroup analysis in Chapter 7.

Non-applicant survey—A subset of Grade 8 students whose teachers recommended them for AVID but who did not complete the application process were asked to complete an online survey in June 2006. These data are used to assess why some students chose not to take part in the project.

Application forms and administrative data used during recruitment—Information on students and parents related to recruitment and selection criteria from students' applications to join the project and their interviews were obtained by project researchers. The data are used in Chapters 4 and 5.

Fieldwork during site visits—Project researchers made regular visits to the 18 school sites implementing BC AVID and to AVID schools in Chilliwack School District. They observed information sessions during recruitment and AVID activities. They also interviewed key members of the site team at each of the 18 schools implementing AVID in Grade 9 and in Chilliwack. Notes from observations and transcripts from interviews have been subjected to qualitative data analysis in order to better understand the implementation of recruitment, selection and subsequent program activities in Chapters 4 and 6.

Data collection forms—From September 2005, project researchers established a system of teacher-completed forms to daily record the nature of AVID class activities, attendance by project participants, departures from the class and additions from the waiting list. Tutors also completed an initial information form, and their attendance at tutorials was recorded. In combination, these data collection forms provide a rich source of information on students' exposures to AVID, student-to-tutor ratios and the arrivals and departures of class members. These data are reviewed in Chapter 7.

Notes from conferences, AVID Summer Institute, project training workshops and other communications between site team members, project researchers and AVID Steering Committee (hereafter "ASC") members—These communications and activities were noted by project researchers and provide important background information to better interpret implementation successes and challenges in Chapters 4 to 7.

AVID Center guides, curriculum and website, Project Operations Manual, project design documents, memos, minutes from meetings and related communications—These materials generated by project partners are important reference sources in interpreting project development and program delivery in Chapters 3 to 7.

Existing educational research literature—The project design was informed by the findings of other researchers, especially those who have investigated AVID in the U.S. These are discussed in Chapters 1 and 2.

Table 1.1: Planned BC AVID Pilot Project Activities

Grades	Cohort 1 Activities	Grades	Cohort 2 Activities
8	School Identification + Recruitment, AVID Summer Institute/ Training, Orientation Sessions, Student Identification + Recruitment (Baseline Surveys for Students and Parents)	7	
9	BC AVID Delivery: Placement in BC AVID Elective	8	School Identification + Recruitment, AVID Summer Institute/ Training, Orientation Sessions, Student Identification + Recruitment (Baseline Surveys for Students and Parents)
10	BC AVID Delivery: Placement in Rigorous and/or Advanced Courses and BC AVID Elective (Longitudinal Panel Wave 1)	9	BC AVID Delivery: Placement in BC AVID Elective
11	BC AVID Delivery: Placement in Rigorous and/or Advanced Courses and BC AVID Elective (Longitudinal Panel Wave 2)	10	BC AVID Delivery: Placement in Rigorous and/or Advanced Courses and BC AVID Elective
	(Grade 11 Follow-Up Survey)		
	Early Implementation Report		
12	BC AVID Delivery: Placement in Rigorous and/or Advanced Courses and BC AVID Elective (Longitudinal Panel Wave 3)	11	BC AVID Delivery: Placement in Rigorous and/or Advanced Courses and BC AVID Elective
	(Grade 12 Follow-Up Survey)		(Grade 11 Follow-Up Survey)
PSE1/ Break	(Longitudinal Panel Follow-Up)	12	BC AVID Delivery: Placement in Rigorous and/or Advanced Courses and BC AVID Elective
			(Grade 12 Follow-Up Survey)
	Interim Impact Report		
PSE2/ PSE1	(66-Month Follow-Up Survey)	PSE1/ Break	
PSE3/ PSE2		PSE2/ PSE1	(66-Month Follow-Up Survey)
	Final Impact Report, Including Longitudinal Panel Findings		

OVERVIEW OF PLANNED RESEARCH

Table 1.1 summarizes key project activities that are planned for the BC AVID Pilot Project and the timing for each relative to the grade year of the participants. Steps include the identification and recruitment of schools, training of school staff, orientation sessions, identification and recruitment of students,[16] establishment of different methods of data collection—surveys, observations of program delivery and from post-secondary records—and understanding of impacts through implementation research, including a longitudinal panel study (as described in Chapter 8). Chapter 6 summarizes Grade 9 BC AVID program activities, and participation rates are provided in Chapter 7.

As seen in Table 1.1, findings from the BC AVID Pilot Project will be incorporated into three major published documents—the present report, a report on the interim impacts and a report on the final impacts. BC AVID's early implementation research findings are presented later in the present report. Future publications are discussed in Chapter 8.

THE IMPORTANCE OF AN APPROPRIATE RESEARCH DESIGN: MANAGING THREATS TO VALIDITY

While very few educational programs are standardized once they are implemented as formal policy, standardization is usually considered necessary by those who are interested in evaluating a program's potential as policy (Cook, 2003). Accordingly, there are plans to standardize BC AVID implementation as much as possible across participating BC AVID schools in an attempt to maximize the internal validity of the BC AVID Pilot Project.

Random assignment of individual students within a school ensures that the program group will share local, school-level attributes with the comparison group. Employing such a method, however, increases the likelihood that members of the comparison group are exposed to program resources or materials. One challenge to the internal validity of the findings of the BC AVID Pilot Project is the possibility that comparison group members receive BC AVID services. There is a real possibility that some of those students will become familiar with BC AVID's strategies—e.g. Cornell note-taking and Socratic inquiry—because both BC AVID program and comparison group students are attending the same school and, in some cases at least, taught by the same AVID-trained

16 Recruitment and selection processes are detailed in Chapter 4; Chapter 5 gives a description of the baseline characteristics of the research sample.

teachers. Some teachers who have been taught how to make the most of AVID strategies might apply these new methods in a non-AVID classroom that contains both BC AVID program and comparison group students. Alternatively, transfers of knowledge or behaviour could occur between BC AVID program and comparison group students taking part in the same non-AVID classrooms or through other social interactions.

Part of the benefit to schools of participating in the BC AVID intervention is that the BC AVID teachers have the opportunity to attend an AVID Summer Training Institute in San Diego, California, to learn about AVID strategies. There, BC AVID teachers also are trained on how to use AVID strategies outside AVID classrooms, although adoption of such strategies outside the AVID class membership might not be systematic. Besides alerting BC AVID schools to the risk that this contamination poses to the derivation of impact estimates, plus ongoing project monitoring, little can be done to regulate its potential occurrence. Supplementary evaluation approaches can be adopted if contamination does occur. [17]

The major effects of BC AVID, if any, are expected to arise from program group students' participation in the BC AVID elective, from their participation in rigorous or advanced placement (AP) courses and from the tutoring that they receive from BC AVID tutors. The Canada Millennium Scholarship Foundation's primary interest is in the effects of the BC AVID intervention on program students who might not otherwise attend post-secondary education. For project participants not participating in the AVID class, the effects of being exposed to a handful of AVID strategies in some other subject area classrooms might not be significant relative to the effects of the whole BC AVID intervention being tested. Based on the experiences of the two-school AVID program running in the Chilliwack School District independent of the BC AVID Pilot Project, the spread of BC AVID strategies beyond the BC AVID elective is not likely to be extensive during the early years of implementation under investigation here.

Another possible threat to the internal validity of the findings of the BC AVID Pilot Project lies in the risk of variation in the BC AVID intervention between the schools in which it will be implemented. While BC AVID has very clear guidelines concerning what activities should occur through Grades 9 to 12 within the BC AVID elective, schools have flexibility in determining a student's eligibility, in how the various BC AVID activities are scheduled and in the exact activities undertaken (see Chapter 4 for a complete discussion on BC AVID's recruitment and selection processes). Another consideration is the ever-changing, and thus challenging, settings schools represent for experiments. Cook (2003, p. 131) characterizes schools as "large, complex social organizations" with "multiple, simultaneously occurring programs; disputatious-building politics; and conflicting stakeholder goals." Such complexity calls for careful training, oversight and monitoring of the implementation of the BC AVID intervention to facilitate a better understanding and minimize the extent of threats to its internal validity, although variation in the BC AVID intervention across sites could well challenge the internal validity of the experiment. Researchers working on this pilot project will be required to establish contingency plans to forecast and produce valid estimates wherever contamination and inconsistent delivery are suspected.

STRUCTURE OF THE REPORT

Chapter 2 presents a detailed review of the AVID program. Chapter 3 discusses the organizational structure of the BC AVID Pilot Project, including project partners, monitoring plus support strategies and research design. The BC AVID recruitment and selection processes are provided in Chapter 4 and the baseline characteristics of the research sample are subsequently identified in Chapter 5. Chapter 6 summarizes Grade 9 BC AVID program activities. Participation rates in Grade 9 BC AVID classrooms—counting student departures, waiting lists and tutorial activities, as well as BC AVID staff turnover—are given in Chapter 7. Lastly, Chapter 8 discusses future research directions.

17 How far contamination will occur in practice is debatable. It is rarely anticipated that students not taking high school electives such as music will inadvertently learn music from their peers who do take such electives. Nonetheless, AVID is, in part, designed to encourage the spread of its strategies outside the class, and the challenge this poses to a research design has been recognized and built in to evaluation plans.

2

Positioning the AVID Program in the BC Context

Introduction

This chapter describes the AVID program and positions BC AVID within the evolution of AVID from an individual class to a movement for whole-school reform. First, the components of the program are reviewed, together with a brief history of the program and an overview of its associated professional development. Next, the attributed education theory behind AVID is examined, along with the mechanisms through which AVID might operate. This is followed by an outline of the BC AVID logic model, including its assumptions and expectations and a review of existing evidence on the impact of the AVID program. The chapter concludes with an examination of the AVID program in the Chilliwack School District, which predated the BC AVID Pilot Project by three to four years.

CHAPTER SUMMARY

- **The AVID program is substantively delivered through an AVID elective in a school's regular academic timetable.** Eleven AVID Essentials guide the implementation of the program. Students participate in curriculum, tutorial and motivational activities.
- **The AVID Center provides a wide selection of professional development activities.** Teachers and administrators attend five-day summer institutes. AVID district directors receive a two-year cycle of training.
- **The BC AVID model strongly focuses on high school students who are academically in the middle and have post-secondary potential.** Students voluntarily take an AVID elective wherein they learn study skills to assist them in successfully completing a rigorous curriculum and accessing a post-secondary program. The model assumes sufficient resources for implementation and assumes both short- and long-term impacts.
- **Some theories imply a causal relationship between a program like AVID and changes in a student's preparedness for post-secondary attainment,** although no particular theory was used as a basis for developing BC AVID.
- **Four mechanisms by which AVID might affect students are presented.** The AVID program could benefit students as: (1) an academic upgrading program, (2) an "untracking" program, (3) a mentoring program, and (4) a peer group program.
- **Previous evaluations provide tentative evidence that AVID could benefit underachieving students.** However, no evaluation with a rigorous framework, including random assignment, has been undertaken.
- **AVID was implemented in the Chilliwack School District in 2001.** This district's experience has helped to inform the design and implementation of the BC AVID Pilot.

OVERVIEW OF AVID COMPONENTS

- Similar to the Upward Bound and Gear Up programs operating in the U.S., AVID targets a small set of eligible high school students (Sheets, 2006). The AVID elective offers an enhanced academic program for high school students who might not be suitably prepared to enrol in a four-year university or college program (James, Jurich, & Estes, 2001). According to the authors, AVID enlists middle-achieving students with no important behavioural or attendance problems into an AVID elective.

The elective has the following basic features:[18]

- All those chosen to be part of AVID enrol in a high school elective that meets for one hour every school day (or the nearest equivalent permitted by the school schedule).
- AVID students, who would normally not take honours or advanced placement (AP) courses, are now encouraged to enrol in those courses and given academic support in their AVID elective.
- AVID teachers instruct AVID students in the use of a set of best practices, including a specific note-taking technique called Cornell notes and collaborative learning.
- Trained tutors (ideally local post-secondary students) provide tutoring during the AVID elective.
- Guest speakers (e.g. local professionals) who can tell students more about their area of work are invited.
- Field trips to colleges and universities and academic-related events are undertaken.

The goals of AVID for the AVID students are quite clear. AVID is successful if it increases their high school graduation rates and university or college participation rates (James et al., 2001). AVID can also be seen as successful if it raises academic standards in the school (or district) as a whole. This could be because the improved performance of AVID students raises the average or because school-wide improvements affect non-AVID students.

AVID begins by identifying conscientious high school students who meet eligibility criteria that indicate they would likely benefit from additional support: getting B or C grades, having untapped potential, being motivated to go to university and lacking major behavioural problems (Guthrie & Guthrie, 2002). Among the students who apply to the program, AVID enlists those who meet the criteria. The chosen students are enrolled in a regular elective high school class meeting for the equivalent of an hour each day. In this year-long class, they are taught a number of study skills and learning strategies. These skills and strategies are put to the test when the AVID students are enrolled in the most rigorous courses available in their schools, the courses typically taken by higher-achieving students. The idea is that with appropriate support, students academically in the middle can raise the quality of their work, raise their grades and qualify for admission to a university or

18 This information on basic features is derived from Swanson, Contreras, Cota and Gira (2004) and Guthrie and Guthrie (2002).

college program. Other important features of AVID include the intensive, ongoing mentoring provided by the AVID teachers, regular tutoring from local post-secondary students (and others like teachers-in-training) and a series of information activities, including campus visits and career counselling, that are part of the AVID curriculum.

Schools implementing the AVID elective are also encouraged to apply AVID strategies, such as Cornell note-taking and Socratic seminars, in courses other than the elective. Thus, there is an important distinction among schools implementing the AVID program between AVID-eligible students that can qualify for the elective's full range of activities and other students who might still benefit from the broader dissemination of AVID strategies.

The AVID Essentials

The main features of the program are captured in the AVID "Essentials." These are intended to characterize every program that calls itself "AVID."[19] For the BC AVID Pilot Project, the BC Ministry of Education contracted with school districts piloting BC AVID to implement the Essentials as follows:

1. **Selection**—AVID student selection must focus on students in the middle (2.0 to 3.5 GPA as one indicator) who have untapped academic potential and would benefit from AVID support to improve their achievement and post-secondary preparation.

2. **Participation**—AVID program participants, both students and staff, must choose to participate.

3. **Scheduling**—The school must be committed to full implementation of the AVID Program, with the AVID elective class available within the regular academic school day.

4. **Rigour**—AVID students must become enrolled in a rigorous course of study that will enable them to meet requirements for post-secondary enrolment.

5. **Writing**—A strong, relevant writing curriculum must provide the basis for instruction in the AVID elective class. [20]

6. **Inquiry**—Inquiry must be used as a basis for instruction in the AVID classroom.

7. **Collaboration**—Collaboration must be used as a basis for instruction in the AVID classroom.

8. **Tutorials**—A sufficient number of trained tutors must be available in the AVID class to facilitate student access to rigorous curriculum.

9. **Data**—AVID schools or districts must provide program implementation and student progress data. These will be monitored through the AVID Data System, with results analyzed to inform the AVID certification process.

10. **Resources**—The school or district must identify resources for program costs; agree to implement AVID Program Implementation Essentials; and work toward participation in annual AVID certification. Commitment to ongoing participation in AVID staff development is also required.

11. **School site team**—An active interdisciplinary site team must collaborate on issues of student access to, and success in, rigorous post-secondary preparation courses.

The first two Essentials capture the target group for an AVID program. They are academically average students who are sufficiently motivated to volunteer for AVID. Care is taken in the selection process to make sure that the students themselves are motivated to participate, rather than being volunteered by their parents or guardians. Typically, other selection criteria include the absence of any major identified attendance problems or behavioural issues. It should also be noted that AVID students are supposed to have untapped academic potential. In practice, this idea involves looking for students who have scores on standardized tests that indicate the ability to obtain higher grades than they have actually received.

Essential 4 captures the "untracking" component of AVID discussed later in this chapter. In the U.S. context, academically average students targeted by AVID would not normally be enrolled in the college-bound track at their high schools and might not be eligible to take courses that are required for certain university programs, such as physics, chemistry and calculus (Mehan et al., 1996). By placing AVID students in the more rigorous courses (and giving them academic support in the AVID elective), AVID allows students to jump into the college-bound track.

Essentials 5 to 7 summarize a key part of the AVID curriculum. These are sometimes referred to by the acronym WIC R, which stands for "Writing, Inquiry, Collaboration and Reading" (Swanson, Contreras, Cota, & Gira, 2004). As part of the writing component, students receive instruction on the writing process and do a variety of writing activities. One of the writing techniques is the Cornell note-taking system. "Inquiry" refers to the development of critical thinking skills; two techniques used here are Art Costa's Model of Intellectual Functioning and the Socratic dialogue.[21] "Collaboration" is the practice of working in groups in the AVID elective. Critical reading is intended to help students become more effective and confident readers (Swanson et al., 2004).

19 A large portion of the content of this section is derived from Guthrie and Guthrie (2002).
20 Since the start of the Pilot Project, the AVID Center has changed this Essential to include both writing and reading—i.e., "A strong, relevant writing and reading curriculum must provide the basis for instruction." Most BC sites have chosen to adopt this change
21 A Socratic dialogue is a systematic process for examining the ideas, questions and answers that form the basis of human belief (Copeland, 2005). The process helps to build skills in the areas of reading, listening, reflection, critical thinking and participation.

Essentials 3 and 8 to 11 impose requirements on the schools implementing AVID. So that AVID does not become a before- or after-school add-on and is, as intended, an integral part of a school's curriculum, Essential 3 requires that the AVID elective be a real scheduled course. In this way, AVID is offered as an elective and often supplants other electives, such as music, art or physical education, for the students who take it. Essential 8 tries to institutionalize the practice of using tutors in the AVID classroom. Since tutoring is an important AVID component and one of the major expenses of running an AVID program, this Essential tries to ensure that it will not be overlooked. Essential 9 requires that schools participate in the standard data collection processes set up by the AVID Center. Essential 10 reinforces the requirement that trained staff, including trained tutors, delivers and supports AVID in the school by requiring that schools make sure that adequate funding is available for the program. Essential 11 is an attempt to have a team of the more enthusiastic and committed teachers within a school become part of the AVID program.

A Brief History of AVID

The history of AVID is well documented and often recounted in AVID training sessions. A San Diego high school teacher named Mary Catherine Swanson created AVID in 1980 in response to a major district restructuring initiative that left her with a group of students who were much less academically prepared than those she had previously taught. Believing that they too could succeed, even in the most rigorous courses then available, she created an elective that would fill in the gaps in the academic and study skills of her new students (Freedman, 1998). With the support provided by that class, the students were placed in the college-bound track and many were able to succeed and go on to post-secondary education (Mehan et al., 1996). Since that time, AVID has spread to numerous other school districts, including Chilliwack School District in BC, and has many adherents.

AVID Professional Development

The AVID program is supported and overseen by the non-profit AVID Center in San Diego, California. It runs professional development activities in AVID techniques and helps schools start up AVID programs. One of the core events that staff from an AVID site must attend before implementation is a week-long AVID Summer Institute. This equips the teaching staff and administrators with the knowledge and skills to deliver the AVID program.

The Summer Institute includes various strands or focus areas, including a mandatory strand for new AVID elective teachers. Other sessions provide more specific training for AVID administrators, coordinators, counsellors and subject area teachers (math, science, social studies and English). A tutorology strand prepares AVID staff to work with and train AVID tutors. In order to accommodate differences between the U.S. and BC graduation requirements and post-secondary expectations, training for BC AVID elective teachers and counsellors provided additional BC counselling and post-secondary resources.

The AVID Center provides a two-year cycle of training for AVID district directors called AVID District Leadership (ADL) training to enable them to support the implementation of AVID in their school districts. The Center also provides training for regional and district directors who have experience with AVID sites intended to support ongoing implementation of AVID.

Other professional development activities include Path and Strategies sessions. The Student Success Path is a two-day training session for AVID staff offered in similar curricular areas or strands as at summer institutes. Educators involved in BC AVID have attended such sessions in Chilliwack, BC, presented by AVID-certified instructors. Strategies for Success is a one-day introduction to AVID strategies and techniques and is recommended for staff new to AVID. This has been offered locally to BC educators.

Whole-School Reform

The AVID program began as a program to assist individual students to improve their academic performance by teaching them learning strategies and techniques designed to increase their ability to succeed in a rigorous high school curriculum and to meet college or university entrance requirements (Mehan et al., 1996). AVID students receive instruction in the AVID classroom and practice their newly learned skills in their other academic courses taught by AVID-trained teachers. These teachers form an AVID site team that collaborates to assist AVID students to succeed in their academic courses. This AVID model informed the design of the BC AVID Pilot.

Subsequent to the design of the BC AVID Pilot Project and as the AVID program has grown, the AVID Center has broadened its focus from a program primarily intended to assist individual students to one that seeks to spread AVID strategies throughout whole schools and school districts. They have also more recently focused on the vertical articulation of the program from the elementary-school level through to graduation. AVID-trained teachers are encouraged to use AVID strategies in all their regular courses, thus encouraging the spread of these strategies throughout entire student populations. This whole-school reform, while very interesting educationally, is not the focus of this particular study. The BC AVID Pilot Project remains focused on individual student achievement rather than the achievement of entire schools. This focus underlies the selection of possible theoretical interpretations underlying the AVID intervention and mechanisms through which the program might work, which are reviewed below.

THEORY BEHIND AVID

All impact evaluations test some kind of theory, even if that theory is unrefined or unstated. Identifying the theory underlying an intervention is important because it: (1) identifies how the intervention is expected to solve the problem under investigation; (2) permits the generation of hypotheses that could be tested; (3) pinpoints important constructs to be measured, and (4) helps to explain the impacts obtained.

Formal theories underlying AVID are not reviewed in detail here for two reasons:

- Theories to explain how the AVID program might be expected to change access to post-secondary education were not integral to the start of AVID.
- A search of the education and other relevant literature suggested that there was no one theory that could account for why the AVID program might help students to increase their overall Grade Point Average (GPA) while in secondary school, to graduate and to better prepare for post-secondary education.

A variety of existing theories implies a causal relationship between a program like AVID and its intended outcomes. In this review, four broad theoretical perspectives stood out in terms of being closely related to the actual composition of the AVID program. These included: Control (or Choice) Theory; Socio-Cultural Theory and Social Constructivism; Attribution Theory and Motivation; and Social Capital Theory. A summary of these theories and their possible applicability to the AVID program is presented in Appendix A.

Since the evaluation was not testing any formal theory, alternative explanatory pathways were considered to inform the design of the evaluation. Several potential mechanisms for how AVID might influence the outcomes of individual students were identified from existing literature about the program. These mechanisms, reviewed below, informed the project logic model (also below) that was used to design the evaluation, determining the assumptions underlying the required inputs, expected outputs and impacts.

VIEWS OF THE MECHANISM THROUGH WHICH AVID OPERATES

The activities associated with AVID are clearly outlined in AVID teacher guides (Swanson et al., 2004). Why these activities might help achieve the goals of AVID is less clear. In this section, we briefly describe four different mechanisms by which AVID might affect students. These four mechanisms are not mutually exclusive and, as the Essentials make clear, are all dependent on integral parts of the AVID package. The mechanisms are as follows:

- AVID teaches students much-needed study skills as part of upgrading ;
- AVID "untracks" average students by placing them in rigorous and advanced courses;
- The AVID elective teacher acts as a powerful mentor for AVID students; and
- Participation in the AVID elective provides a supportive peer group that facilitates higher achievement.

AVID as an Academic Upgrading Program

Perhaps the most prominent of AVID activities is the AVID curriculum summarized above as Essentials 5 to 7. The AVID curriculum involves instruction in a variety of well-known study skills and systematic tutoring, ideally provided by trained post-secondary students from local institutions. The rationale is that middle-achieving students who are new to AVID could lack certain skills that would allow them to be better prepared for post-secondary education, rather than lacking ability per se.

If schools already teach these study skills, the impact of this aspect of AVID might not be very great. Some schools already teach the use of Cornell notes and require that students organize their material in binders, although such instruction might not be universal. For schools that do not systematically teach such skills, this aspect of AVID could be a powerful independent path through which AVID positively affects students.

There is some evidence that AVID uses the promise of a better future to generate enthusiasm in its curriculum (Freedman, 1998). Organizing learning activities around the idea of what this kind of future might look like for each student could help to generate and sustain the kind of academic effort students require to meet the high achievement standards set by AVID.

AVID as an "Untracking" Program

"Tracking"—the practice of assigning students to different courses based on an assessment of their academic ability—is quite common in the U.S. (Mehan et al., 1996). Typically, students of average achievement would not be assigned to the college-bound track. It can prove difficult for anyone not assigned to this college-bound track to change tracks mid-stream because of course prerequisites. For example, taking the college-bound Grade 10 math course might require that students have previously taken a more rigorous Grade 9 math course.

Simply by inserting the AVID students into the courses taken by the higher track students, AVID gives them a chance to catch up with their college-bound peers. The academic support provided in the AVID elective is seen as necessary to support the AVID students in their attempts to catch up.

It is this "untracking" process that is highlighted by Mehan et al. (1996) as being responsible for the increased post-secondary access of AVID students. Given, however, that AVID selects students using performance on standardized tests as one of the selection criteria—as mentioned before, AVID is specifically looking for academically average students with untapped potential—AVID could be operating as a "retracking" program, essentially rescuing misclassified students from the lower track and placing them in the higher track where they belong. AVID might be helping students who are misclassified or let down by the existing tracking system, but since it does not target academically average or below-average ability students without untapped potential, it does not necessarily act to eliminate tracking in the school.

AVID as a Mentoring Program

The student-teacher relationship is important in AVID. The AVID elective teacher can play the role of an adult mentor for the students. He or she is a trained educator who could be in close touch with the AVID students for as long as they are in the program. This teacher comes to know them in a much more complete way than other teachers and often helps with non-academic problems that can arise in any adolescent's life.

AVID was developed in very large urban high schools within which the source of academic support for students that are not identified as part of a special program, such as for high or low achievers, might be unclear. Their learning typically would not be the focus of a single, dedicated staff member. Therefore, it could be that AVID works for AVID-eligible students by refocusing attention on them, reconnecting them through an active support network to the school's services and helping them to better coordinate their paths through high school.

If true, the mechanism through which AVID affects student achievement highlights the need to have a committed AVID teacher and site team (see Essential 11). Given the importance of personal relationships, any rapid turnover in the site team personnel might have a negative effect on student achievement.

AVID as a Peer Group Program

Because of their active participation in AVID, students tend to form close bonds not only with the AVID elective teacher but also with their fellow AVID students. Not only might this establish friendships for the AVID students, but it also creates a peer group of fellow students with similar background achievement experiences. The mutual support, peer identification and validation provided by the peer group could be instrumental in the success of AVID students.

Finally, it is worth mentioning that the positive outcomes observed among AVID graduating students to date could be due to a strong selection effect rather than the program services. AVID is highly selective in terms of the kinds of students enrolled. In addition, not all selected students receive AVID through three or more years of high school. Thus, it is plausible that by the time they graduate from high school, the remaining AVID students represent a select group of students academically in the middle who would have enrolled in post-secondary programs with or without the support of the program. One reason for running an experiment, rather than another kind of evaluation, is to generate evidence that can assess the extent to which the program, rather than selection, accounts for the success of AVID students.

THE BC AVID LOGIC MODEL

In order to inform the evaluation, this section outlines a basic logic model used to illustrate what the intervention hopes to achieve and how. More specifically, the logic model lists what resources are expected to be needed to accomplish the intervention's objectives, any initial and intermediate changes in behaviour that would be required for the intervention to meet its objectives and the short-, medium- and long-term impacts that are expected because of the intervention. The logic model is presented schematically in Text Box 2.1, with further description below.

Text Box 2.1: BC AVID Logic Model

Resources needed to achieve objectives	Expected initial and intermediate changes in behaviour	Expected short- and medium-term impacts	Expected long-term impacts
▪ Adequate funding ▪ Project Operations Manual ▪ Project services ▪ Professional development ▪ Spaces in high school courses ▪ Sufficient PSE spaces ▪ School district involvement ▪ School staff participation ▪ Grade 8 students who volunteer ▪ Parents/guardians who agree to student participation ▪ Evaluation expertise	▪ Students and parents are notified and they understand what participation involves ▪ Students and parents apply to participate, attend info sessions and complete applications ▪ Students take up BC AVID places if offered, and persist in the AVID class for four years	▪ Orientation toward future activities ▪ Awareness of PSE options ▪ Interest in high school achievement ▪ School attendance ▪ School dropout rates ▪ Enrolment in rigorous courses ▪ High school graduation ▪ Grades, test scores and GPA ▪ Approach to learning ▪ PSE intentions ▪ Knowledge of PSE options, costs and financing ▪ Saving for PSE	▪ Successful enrolment in first year of a chosen PSE program ▪ Successful completion of first year of a chosen PSE program ▪ Changes in the PSE choices that students make

Notes: Target population: Grade 8 students academically in the middle Problem: Student grades are too low to meet prerequisites for many post-secondary education (PSE) programs

The BC AVID logic model is strongly focused on students academically in the middle and relies on the following basic assumptions:

- There exist AVID-eligible students who have the potential to enrol in post-secondary education and who can cope with more challenging schoolwork if given appropriate skills and support. Without AVID, it is assumed that this potential is unlikely to be realized before they complete high school.
- Such students will hear about the project, understand it and either self-identify as suitable candidates or will be among those identified by school staff as eligible for the program.
- These students will be among those who want to have the chance to take part in a post-secondary preparatory program rather than other electives in Grades 9 to 12.
- These students will be identified using appropriately designed selection criteria.
- With recognition, encouragement and support, the selected students will be enrolled in more rigorous and advanced courses than would otherwise have been the case and will apply for and enrol in post-secondary programs that they would not otherwise have qualified for or been motivated to take.
- The AVID curriculum, based on WIC R, will give students the skills they need to succeed in post-secondary-preparatory courses.
- AVID techniques will transform students from passive learners into active classroom contributors and critical thinkers.

These assumptions comprise the framework under which BC AVID is expected to work.

Resources Expected to Be Needed to Achieve Intervention Objectives

Inputs are the factors that will allow the BC AVID intervention to operate successfully. The following major inputs are expected:

- provision of all project services in accordance with the BC AVID Pilot Project Operations Manual, including a professional development program developed by the AVID Center;
- ongoing provision of high school and post-secondary education with sufficient places to accommodate any likely increase in student numbers generated by the experiment;
- Grade 8 students who volunteer to participate in the intervention;

- parents or guardians who agree to their children participating in the intervention; and
- teachers and other staff participating actively in the program.

Expected Initial and Intermediate Changes in Behaviour

For the BC AVID intervention to have a chance to work, students and parents or guardians must respond in the following particular ways:

- students and parents or guardians must be notified of and understand what is involved in participation in the BC AVID Pilot Project;
- students and parents or guardians must apply to participate in the intervention, attend information sessions and complete application forms in order for the students to be considered for selection; and
- students must take up their BC AVID places if offered and persist in the AVID elective at BC schools that offer AVID for four years while meeting BC AVID requirements.

Anticipated short- and medium-term impacts on students expected because of participation in BC AVID include the following:

- increased orientation toward the future;
- increased awareness of post-secondary options;
- increased interest in high school and better attendance at high school;
- lower high school dropout rates;
- enrolment in more rigorous courses;
- increased chances of high school graduation;
- improved grades, test scores and overall GPA;
- changes in approach to learning;
- change in intentions to pursue post-secondary education;
- increased knowledge of post-secondary education options, costs and financing; and
- increased saving to meet additional costs of post-secondary education.

If the students understand how AVID might help them, this may change their expectations of their future activities to include post-secondary education. More students could see post-secondary education as a realistic, achievable and affordable goal and change their behaviour to increase their chances of finishing high school and enrolling in a chosen post-secondary education program.

The expected impacts on short- and medium-term outcomes stem largely from the assumption that students newly motivated and equipped to enrol in post-secondary education or motivated to pursue different post-secondary goals (e.g. enrolment in a more demanding course of study or at a more prestigious institution) will engage more in behaviours conducive to achieving that goal.

Long-Term Impacts

Two major long-term impacts are of particular interest in the BC AVID Pilot: (1) successful enrolment in a chosen post-secondary education program, and (2) successful completion of the first year of a chosen post-secondary education program. In addition, a third, long-term impact will likely prove important in understanding BC AVID's effects: changes in the post-secondary program choices that students make.

BC AVID could contribute additionally to the second impact because students who successfully enrol in a post-secondary education program who have been equipped with learning skills from AVID might be better equipped to undertake more advanced study and persist further in their studies toward the completion of the chosen program.

Impacts on long-term outcomes, such as persistence into the second and later years of post-secondary programs, completion of programs and certification will not be observed under the research described in this report. Similarly, subsequent labour market participation outcomes are beyond the scope of the current work.

PREVIOUS RESEARCH ON THE IMPACT OF AVID

This section reviews some key previous attempts to establish the impact of AVID in U.S. schools. The intent and theory of the AVID program reviewed above suggest that there is potential for the program to improve post-secondary outcomes for middle-achieving students. The BC AVID Pilot Project is testing this potential through the establishment of the program on a pilot basis in 21 BC schools. Engaging in a demonstration project on this scale is a bold undertaking. Thus, to assist in planning the design and implementation of the project, the researchers reviewed earlier research in the U.S.

There has been no random assignment evaluation of AVID. Studies to date have not used carefully constructed comparison groups, and some have limited their analyses to AVID students alone (Slavin & Fashola, 1998). Thus, the BC AVID Pilot Project will be the first large-scale evaluation to track students from selection through graduation and into post-secondary education and the first to establish a rigorous framework for calculating the impact of AVID.

A book-length evaluation by Mehan et al. (1996) focused on 248 of 1,053 students who participated in AVID at eight San Diego high schools for the entire three years of the program (1990–92). They also utilized another sample consisting of 146 of the 288 students who had participated in AVID for one year or less. The selection of students was a function of who could be located at the time of the study, and it is not known to what extent the samples are biased by this selection method.

Of the 248 AVID completers, 48 percent reported attending a four-year college immediately after high school, 40 percent were attending a two-year college and 12 percent were working or "doing other things," such as travelling or volunteering. The researchers note that these figures compare favourably with the data for San Diego public schools as a whole, where 37 percent of students in the district went on to four-year colleges. They also found that the AVID completers compared favourably to the students who participated in AVID for one year or less; 34 percent of the latter group went on to four-year colleges.

AVID appeared to be particularly effective with Latino and African-American students. For example, whereas only 25 percent of Latino students in San Diego schools went on to four-year colleges in 1992, 43 percent of Latino AVID completers did so. Among African-American students, 55 percent of AVID completers enrolled in four-year colleges versus 38 percent for all other African-American students in the district. As there was an overall decline of white high school students in these school populations, most of the sample comprised these ethnic groups.

Importantly, the researchers also found that AVID students from the lowest income stratum (less than USD 20,000 in annual income) enrolled in four-year colleges at equal or higher rates than students from higher income strata (USD 20,000 to 59,000). At the same time, AVID students whose parents or guardians had no college education were as likely to enrol in a four-year college as were AVID students whose parent(s) or guardian(s) were college graduates.

Mehan et al. (1996) also attempted to interview the same AVID graduates one and two years after high school graduation in order to determine if the program had an effect on post-secondary persistence. The researchers cautioned that their samples were too small to draw any firm statistical conclusions, but their descriptive findings did raise concerns. Among 168 interviewed students who had been out of high school for one year and 46 who had been out for two years, they found very little upward mobility. No students transferred from two-year to four-year colleges and no students stopped working to enrol in four-year colleges. About 7 percent (of the 168) transferred from four-year to two-year colleges, and 11 percent of the 27 students who enrolled in four-year colleges in 1992 had dropped out.

An evaluation by Watt, Yanez and Cossio (2002) focused on the implementation of AVID in 26 secondary schools in seven school districts in Texas in 1999–2001 as part of school reform designed to "untrack" underserved ethnic minority students. The research was funded federally through Comprehensive School Reform Demonstration (CSRD) grants. Researchers examined a sample of approximately 1,000 students. The researchers found that more schools were enrolling underrepresented students in rigorous courses for the first time. They found that enrolment varied between sites and that it was dependent on teacher and counsellor recommendation. Importantly, the involvement of administrators affected implementation and the degree of involvement of students in rigorous courses. The authors stated, "The principal's level of participation on the AVID site team was central to how effectively AVID was implemented" (p. 48).

Watt et al. (2002) used baseline data that included GPA scores, course enrolment, test scores and attendance. They found that the achievement levels of AVID students were higher overall and the attendance of AVID students was higher than the school norm, although the criteria for selecting students varied between schools and years of enrolment. The extent to which these students would have succeeded without the assistance of AVID is unclear.

Researchers examined class attrition rates using aggregate data. Input from AVID staff helped to explain variations: "AVID student enrolment grew from Year 1 to Year 2 [.... H]owever, some students did drop out of AVID for various reasons. AVID teachers explained that many of the students were initially misidentified for the program." With regard to this issue, lack of knowledge of selection criteria by site team members was cited as a factor. Other reasons for attrition were "student preferences, district realignments and students transferring to non-AVID campuses" (p. 52).

The CSRD model had a particular focus on school-wide change. Researchers found that schools varied in the extent to which site team members adopted AVID strategies in their regular courses. The authors stated, "The most common AVID strategies that were observed in non-AVID classrooms were the use of Cornell notes, binder organization and Socratic questioning" (p. 58).

While AVID evaluations provide tentative evidence that underachieving students with average or above average achievement test scores can be helped to go on to university at much higher rates, the lack of genuine control groups and factors associated with the selection of AVID students mean that caution is required in interpretation of the data (Slavin & Fashola, 1998).

AVID IN THE CHILLIWACK SCHOOL DISTRICT

In the hope of deriving practical lessons to inform the BC AVID Pilot Project research and program implementation, project researchers examined AVID's earlier introduction in the Chilliwack School District. This exploratory study's context and conclusions are briefly reviewed here.

AVID began in Chilliwack, BC, with discussions during the 1999–2000 school year at Chilliwack Senior Secondary School (CSSS) involving the principal and staff on the CSSS Professional Development Committee. The topic of these discussions was staff concerns about poor student achievement levels, graduation rates and, in particular, the poor study habits of C-average students. In the spring of 2001, Chilliwack staff visited San Diego and gathered considerable support within the district for the implementation of AVID. As a result, it was decided to implement AVID both in CSSS and in Vedder Middle School (VMS). Once committed teachers had volunteered to become the AVID teachers or coordinators, the two schools began the implementation of AVID by selecting the first group of AVID students by the end of June 2001. An AVID 8 class at VMS and an AVID 10 class at CSSS started in September 2001. That AVID 10 class graduated from CSSS in June 2004.

Three additional schools were added to the Chilliwack AVID program in September 2003: Mount Slesse Middle School, Chilliwack Middle School and Sardis Secondary School. The middle schools currently operate the AVID program, while the secondary school program has been discontinued, in part due to challenges scheduling tutors.

Chilliwack Implementation Study

Project researchers undertook the Chilliwack Implementation Study to help inform the design of the larger BC AVID Pilot Project.[22] An early examination of the Chilliwack AVID Program suggested that the district's experiences implementing AVID might provide very useful information for the Pilot. The experience was valuable because of the extensive implementation completed by the two original schools and the adoption of the program at other district schools. The program appeared to have district support, the support of several teachers and administrators and a willingness on the part of staff to share information about their program.

Preliminary fieldwork was conducted in January to June 2004 and provided a description of the Chilliwack AVID program. This included details on student recruitment and selection, identification of implementation challenges encountered by Chilliwack AVID staff, as well as their responses to those challenges, and implications for the larger BC AVID Pilot Project, together with an assessment of the risk or threat to the random assignment evaluation from any potential, school-wide influences on the comparison group.

The methodology for the study included depth interviews and observations in the five Chilliwack schools that were implementing the AVID program. Teachers and administrators made available some administrative records and a variety of program materials and documents in order to assist with understanding the AVID program and the process of implementation.

The Chilliwack Implementation Study identified a number of AVID program features, outlined below, with implications for a province-wide experimental implementation of AVID.

Selling the AVID Program and Research

Chilliwack schools experienced some internal resistance to the implementation of AVID, due to its perceived cost, origin and exclusivity. The AVID program was perceived as an expensive program to implement, particularly due to its mandatory training at a distant location. It was a U.S, rather than a Canadian, program, which led staff to raise some questions about its appropriateness. It also initially focused on a relatively small number of students.

The pilot project brought external (Foundation) funding for the research project and thus could overcome the apparent challenge posed by devoting resources to a small group of students. It nonetheless seemed beneficial to promote the expected benefits to schools in terms of these resources and accompanying professional development, plus the research project's contribution to knowledge about what works for students. Teachers who would receive the costly training would be accountable to their schools by following a clearly laid out AVID site plan.

22 The Chilliwack Implementation Study was summarized by the Social Research and Demonstration Corporation (SRDC) in an internal draft report.

Tutor Recruitment and Scheduling AVID

Three separate sets of challenges in implementing AVID tutorials emerged for Chilliwack staff: difficulties in finding and training tutors; scheduling AVID into the regular school academic timetable; and providing administrative assistance in tutor recruitment. These challenges could threaten the viability of the program. Most BC schools have a rotating block timetable that makes scheduling tutors particularly difficult. For the pilot project to meet tutor challenges, pilot staff could start recruiting tutors early, focus on nearby colleges and universities where possible and focus on establishing a sufficiently large pool of tutors, possibly through the development of a joint plan of action between sites.

Developing a Strong Site Team

A strong cohesive site team should include an AVID teacher, AVID coordinator, AVID counsellor, AVID administrator and at least four teachers of core subject areas. Chilliwack staff found that having one teacher holding the role of both AVID teacher and AVID coordinator created too heavy a workload. Thus, the district had separate teachers holding the positions at most schools. Some AVID teachers received up to one block of release time from classroom duties in order to conduct AVID Coordinator duties and activities at their school. AVID guidelines indicate that site team membership should be voluntary and collaboration among teachers is necessary but could prove very difficult to obtain, particularly in schools that lack the infrastructure to facilitate collaboration. The project could provide some of this infrastructure and guidelines in the event of staff turnover, so that transitions would be less likely to undermine program delivery.

Student Recruitment and Selection

Chilliwack schools had trouble in recruiting and selecting appropriate students in sufficient numbers and within a suitable timeframe. There were difficulties (1) recruiting all eligible AVID candidates; (2) following the AVID selection guidelines; and (3) ensuring that the involvement of students was voluntary. For the pilot project, it was recommended that schools recruiting from feeder schools have a more extensive set of procedures to ensure that relevant information is distributed effectively and that all eligible and interested students are encouraged to apply.

While Chilliwack staff could refer to AVID program guidelines concerning suitable student selection criteria, they varied in their emphasis on and interpretations of individual requirements, such as grades, what constituted a severe behavioural issue, student motivation and voluntary participation. To help overcome these challenges in the pilot project, Chilliwack staff assisted in the development of procedures and documents for recruitment and selection of project participants.

Class Size

Chilliwack AVID class sizes were sometimes smaller than the average size of other classes in Chilliwack schools, and this concerned teachers who had to justify their smaller classes. Each year, schools experienced attrition within their AVID classes between the time of selection in May, June and September (sometimes in the range of four to six student departures per class). In addition, some students left AVID later due to a family move, being found unsuitable for the program or wanting another elective. Concerns could arise if the number of students in the AVID class was low relative to other courses. In response to this expected attrition and class size challenges, Chilliwack teachers sometimes recruited more than 30 students for a class. For the pilot project, schools were encouraged to maximize recruitment of AVID-eligible students to increase the chances of creating a waiting list to fill vacancies in the event of attrition. [23]

AVID Program's Post-Secondary Focus

Chilliwack staff experienced difficulties surrounding the AVID Center's focus on a four-year university program for AVID students. Some staff expressed concerns that BC universities were more difficult for BC students to access compared to access to U.S. universities for U.S. students. Their perception was that fewer spaces were available, as well as less financial aid. Furthermore, they felt university enrolment did not meet the post-secondary needs of all students. Chilliwack staff changed their program goal to include programs at two-year colleges and technical institutes. This was also to be considered a successful outcome for the pilot project.

Gaining Student and Parent Support

Chilliwack staff identified three ways that student support for AVID could be diminished. Students could be affected if participation in the AVID program became stigmatized. Over time, some AVID students could show a lack of interest in AVID rigour and strategies, such as the homework requirements, working collaboratively and time management. During program implementation, AVID students could experience an implementation dip, where grades could initially become worse, causing concerns about the program from students, parents and staff.

Similarly, a shortage of required parent participation could affect the success of students in the AVID program over time. The program requires parent support of AVID students and parental involvement in the AVID program through at-home support and encouragement of students and contact with the AVID teacher or program. Pilot project staff were encouraged to prepare for these eventualities with respect to student and parent support.

23 It should be noted that at random assignment sites, such a waiting list of students that could fill vacancies in the class would be in addition to a comparison group that would not join the class.

Gaining Staff Support

Chilliwack staff experienced difficulties ensuring the voluntary involvement of staff (an AVID requirement), collaborating effectively and finding time for AVID activities. There were concerns that some teachers might volunteer for the pilot project without fully understanding the time and work involved. There was also a risk that some staff could feel pushed into participating in order for their school to participate in a large funded pilot project. For the pilot project, steps might be needed to keep staff committed for the long term.

Experience from the initial implementation of AVID in the Chilliwack School District has greatly assisted in the design of the BC AVID Pilot Project. Steps were taken in designing project procedures to avoid or overcome challenges faced by the Chilliwack AVID teams. When project site teams met for the first time in August 2004 to develop their site plans, project researchers provided a summary of lessons from Chilliwack implementation to help project teams learn from the Chilliwack experience.

AVID IN THE BC AVID PILOT PROJECT

The present chapter has examined what defines the AVID program, previous research and practice in BC. AVID includes 11 Essentials, an elective run in the regular school day and professional development activities. AVID might produce favourable outcomes due to its promotion of study skills, "untracking," mentoring and peer influences. A BC AVID logic model outlined the expected outcomes from successful implementation through Grades 9 to 12. An examination of earlier research and of the implementation of AVID in the Chilliwack School District has helped to inform the design of the BC AVID Pilot in key areas.

Pilot sites have begun implementing a version of AVID influenced by several factors. For example, not only have site teams taken into account their own local school and district circumstances—as normally occurs with AVID implementation—but they have also needed to embrace the broader research requirements of the BC AVID Pilot. In return for receiving resources to implement AVID (to cover professional development, library, tutor costs and AVID site fees), the schools have been expected to follow research guidelines to ensure that students found eligible for the new program also became research project participants. Sites have needed to co operate with data collection requirements, such as recording student attendance. They have shared in joint project resources, such as the Project Operations Manual, which documents all major project procedures from recruitment to program delivery and is tailored to their BC context, as well as regular meeting and training sessions with other participating sites to share experiences, challenges and successes. In this way, BC AVID represents a variant of the AVID program delivered in U.S. schools.

Chapter 3 will examine the organizational structure of BC AVID in more detail: the school districts and pilot sites involved, professional development activities that helped prepare AVID staff for the pilot and program implementation, the recruitment of two cohorts of students and first-year implementation. The chapter describes the ASC that guides implementation and that has provided pilot staff with the Project Operations Manual and a feedback and support strategy. The research contractor's role in data collection for impact and implementation research, starting in the first year of implementation, is also described. The analysis of the initial data appears in Chapters 4 to 7.

3

BC AVID Pilot Project Organizational Structure

Introduction

This chapter describes the key organizational features that enabled the BC AVID Pilot Project to be developed and implemented. First, the roles and responsibilities of partners and stakeholders involved in the organization of the project are discussed, followed by a description of how the research project was organized. The chapter concludes with a summary of the design and planning of the intervention, together with the timelines for the implementation stages of the intervention.

CHAPTER SUMMARY

- **The project has brought many partners to work together for the first time.** The project exists because of a Memorandum of Understanding (MoU) between the Canada Millennium Scholarship Foundation and the BC Ministry of Education. The first AVID school district in Canada—Chilliwack, BC—has been instrumental in supporting and advising on implementation. The AVID Center provides professional development, certification and support. School districts and school-based site teams deliver the program. The Social Research and Demonstration Corporation (hereafter "SRDC") has been delivering the evaluation and receives data from the BC Ministry of Education, BC school districts, site teams and project participants.
- **The project is coordinated at many levels.** The typical AVID implementation involves regular interaction between each school's site team, its school district and the AVID Center. The project superimposed a research infrastructure on this framework, including the ASC, to advise and guide the project partners. Its functions have included drafting the Project Operations Manual, implementing a support and feedback strategy and overseeing the evaluation.
- **Designing the BC AVID Pilot Project was a complex process involving the many partners and stakeholders.** It has been necessary to adapt the AVID program to match the project's BC context. Curriculum, standardized tests, post-secondary focus and data collection have all required scrutiny and adaptation.
- **The pilot project implements an ambitious and rigorous research design.** The program is delivered as part of a research project from the outset, with data collection integrated into program implementation from the stage

Table 3.1: Roles and Responsibilities of BC AVID Pilot Project Partners

Titles	Role Description and Responsibilities	Organizations
Funder	Responsible for setting the broad policy and research objectives of the pilot project; works with the Steering Committee to support the intervention; responsible for all financial matters.	Canada Millennium Scholarship Foundation
Project Manager	Appointed by the Foundation; accountable for all aspects (external and internal) of the pilot project; responsible for communicating the progress of the pilot project beyond the province, including to federally elected officials, educators and educational researchers; responsible for identifying opportunities to promote the pilot project with interested stakeholders within Canada and abroad; leads and advises the Steering Committee; manages contract with Research Consultants.	Canada Millennium Scholarship Foundation
Project Leader, Field-Based Coordinator and "Lead District"	Formally appointed/contracted initially by the BC government and later by the Foundation to assist and support the implementation of the pilot project, with specific responsibilities for developing and overseeing the implementation of the program in pilot sites. Chilliwack School District coordinates and hosts training for AVID staff in BC; hosts BC AVID website; liaises between AVID educators in BC and AVID Center; provides support to districts on implementation.	Chilliwack School District
School Districts	Responsible for implementing the AVID program, based on AVID Essentials and research requirements established by the Steering Committee; appoints the district director.	15 BC school districts
Local AVID Site Teams	Distinct unit found at the school level, chiefly responsible for recruiting AVID students, setting up the AVID elective and implementing the AVID program, which includes non-classroom activities like developing staff support for AVID and increasing the use of AVID instructional strategies among teaching staff. The local site teams will include the AVID teacher, coordinator, administrator, counsellor and subject teachers; the site team works with the district director.	Participating BC AVID Pilot Project schools
AVID Consultants	Provide training opportunities required for AVID site team members; support implementation through the work of AVID professional consultants; monitor School Districts' adherence to the AVID Essentials; provide necessary AVID curricular materials and mandatory certification of sites.	AVID Center and AVID Western Division
Research Consultants	Responsible for the impact evaluation and implementation research as part of the BC AVID Pilot Project; coordinate student selection and informed consent process with school districts; explain research framework and assist with data collection procedures; responsible for responding to toll-free calls from participants, parents and teachers regarding the research components of the pilot project; randomly assign participants and notify AVID site team and study participants of RA status; procure data and undertake field work and data analysis for six years of evaluation.	SRDC
Provincial Ministry	Administers district contracts related to the pilot project and research support. The role includes helping schools and districts understand the administrative requirements of the project; providing access to ministry data, where appropriate; directing support of the implementation of the pilot project based on Steering Committee policies, guidelines and objectives. Accountable for all contract-related expenses incurred by the School Districts in the delivery of the pilot project.	BC Ministry of Education

of recruitment and selection of participants through to graduation. Considerable resources have been focused on ensuring that the program is delivered consistently and effectively, including provision of the Project Operations Manual, BC- and California-based professional development and training opportunities, monitoring, feedback and support to sites.

FUNDING, INCEPTION, DESIGN

Canada Millennium Scholarship Foundation

The BC AVID Pilot Project is made possible through partnership between the Canada Millennium Scholarship Foundation (hereafter "the Foundation") and the BC Ministry of Education. The nature of the relationship and the obligations of the partners are outlined in a Memorandum of Understanding (MoU) signed in 2003. The Foundation appointed the project manager, who has assumed a central coordinating role, chairing meetings of the project's principal decision-making body, the ASC, and its communications subcommittee.

The Foundation provided the funding base for the implementation of the BC AVID Pilot Project. The Foundation is solely responsible for covering all costs related to the evaluation of the BC AVID Pilot Project and the additional costs associated with implementing the program in 18 Grade 9 to 12, pilot research sites representing 21 schools delivering BC AVID. These implementation costs included support for the role of Chilliwack School District (described below), training all education professionals (school administrators, teachers, tutors, counsellors) who will work with project participants recruited, AVID Center site fees and curriculum materials. Funding was available for planning in 2004 and for implementation in 2005–10. The Foundation also covers the costs incurred by the province in administering school board contracts on behalf of the Foundation.

The Province of British Columbia

The BC Ministry of Education (hereafter "the Ministry") assisted in recruiting school districts to learn about the BC AVID Pilot Project and in selecting schools and districts to deliver the intervention. The Ministry assisted in granting SRDC necessary access to school and school district data for conducting observational research and shared administrative data on participants, as authorized by informed consent of students and their parents.

The province is responsible for ensuring that the financial resources provided by the Foundation are used for the purposes described in the agreement. The province assumes responsibility for its regular, full-time-equivalent funding of students, which covers normal school operating costs such as the salaries of site team members delivering the program.

All districts and schools receive an annual grant administered by the Ministry, which covers:

- AVID Summer Institute for two years (full-site team) and a third year (partial-site team)—fees, travel, accommodation, meals;
- district director training—fees, travel, accommodation;
- AVID library;
- annual AVID site fee;
- hiring and training tutors; and
- up to 14 days of Teacher on Call (ToC) to cover the time required for selecting AVID eligible students by the site team.

Some additional funds are made available to remote regions of the province with higher travel costs.

The Ministry was responsible for leading the selection of BC AVID pilot sites and providing funding to districts as performance objectives are met. The Ministry works with the Foundation and SRDC to ensure the research process is coordinated and completed. The Ministry also assists in interpreting research results on an ongoing basis and in providing the Foundation with financial reports.

Support from the Ministry is provided to the Chilliwack School District to be the lead district and a provincial AVID demonstration site. Support and advice to districts was also provided through the BC AVID field-based coordinator.

Finally, the Ministry reports to the Foundation on budget, expenditures and implementation or assessment progress.

PROGRAM DELIVERY

Chilliwack School District

The Chilliwack School District is a key partner in the project, offering the expertise gleaned from their experiences implementing AVID in middle and high schools. Partners in the pilot project from Chilliwack include the project leader and field-based coordinator. For the purposes of the BC AVID Pilot Project, Chilliwack is responsible for hosting and coordinating training opportunities for AVID educators in BC, hosting the BC AVID website and acting as liaison between the AVID professionals in BC and the AVID Center. Overall, Chilliwack School District has been instrumental in providing support and advice on implementation throughout the project.

AVID Center, San Diego

The AVID Center, an educational non-profit organization, enters into contracts with, and provides advice and support to, participating districts regarding AVID implementation. The Center assisted with AVID pilot site selection in the beginning stages of the project, and it is represented on the ASC.

Based in San Diego, California, the AVID Center is responsible for providing extensive and mandatory training, mandatory certification of sites and all necessary AVID curricular materials. The AVID Center also collects performance data from each AVID school in its central database. The AVID certification process, potentially a source of data for the current evaluation, is described in Appendix B.

BC School Districts and Pilot Sites

Fifteen BC school districts, including 18 pilot sites, entered into agreements with the Ministry and the AVID Center, including an agreement to participate fully in the assessment of the impact of AVID on students.

Districts and sites are responsible for complying with AVID Essentials, including identifying AVID elective teacher(s) and site team members, and assigning a district staff member to be the AVID district director. The district director has an important and central role in the overall site team operation, involving:

- the commitment of time to support AVID implementation in the district school(s);
- working with the AVID sites to coordinate training and networking;
- primary responsibility for ensuring that program components are implemented according to the AVID model and for supporting the development of site conditions that ensure effective AVID implementation; and
- mandatory training, over a two-year period, including visits to AVID schools and capacity-building training to support districts in the development of programs and opportunities to enhance the skills of staff and AVID elective teachers.

Each site has to identify one (or two) cohort(s) of AVID-eligible students to participate in the pilot project. All site team members were expected to receive all required AVID program training. Each school should have purchased at least one AVID library from the AVID Center. The district helps to ensure the AVID classroom has adequate resources, including trained tutors and curriculum materials.

In addition, districts and sites work closely with SRDC to assess the impact of AVID on project participants and work closely with the Ministry on issues of implementation. Reports to the Ministry are prepared regarding outcomes and expenditures. Successes and challenges are also shared with colleagues in other AVID pilot sites.

Local AVID Site Teams

An AVID site team was created at each of the 21 pilot project schools in order to support the implementation of the BC AVID Pilot Project for either one or two initial cohorts of AVID-eligible Grade 8 students. The initial focus of the site team on pilot project participants can be broadened in later years as additional cohorts of AVID-eligible students are recruited, outside the project requirements.

According to AVID program guidelines, the site team at each school is in charge of AVID program planning and delivery. Membership of the site team includes the AVID elective teacher, AVID coordinator, AVID counsellor, AVID administrator and at least four teachers of core subject areas, such as science, math, English, social studies and language, to total a minimum of eight members.[24] These members should have attended the AVID Summer Institute training, be committed to the AVID program and provide leadership for implementing the program within their school. They work collaboratively to create and manage a site plan for AVID program implementation.[25] The district director is not a member of the site team, although the AVID Center requires someone to take this role to ensure district involvement and support.

Site team members have various responsibilities, as outlined below. Site teams could decide to share certain roles or responsibilities across site team members.

- The AVID elective teacher assists in selecting students; plans and teaches the AVID classes that cover the AVID curriculum and methodologies; communicates with parents; and, acting as a mentor, develops a strong interest in the academic and social development of AVID students. The AVID curriculum includes study skills, organizational skills, time management, career information and post-secondary planning.
- The AVID coordinator oversees program implementation; helps to select AVID students; leads the building of the site team within the school; secures tutors and arranges for their training; acts as the program liaison between the school administrator and AVID counsellor and teachers; assists teachers in implementing AVID; organizes field trips and guest speakers; provides contact with parents; plans meetings; and organizes fundraising activities.
- The AVID administrator and principal provides leadership and guides the implementation of the AVID program within the school; schedules AVID into the school timetable; helps select the AVID site team; liaises with the school district and the AVID coordinator; provides financial management of the program at the school level; and communicates with parents.
- The AVID counsellor assists in selecting students for AVID; provides counselling for AVID students (ideally throughout their high school years); assists students in their timetabling; provides support to students and parents as needed; supports the AVID coordinator and teacher;

24 In many BC middle and high schools, English and social studies are combined as humanities.
25 The site team creates an annual site plan that describes how each AVID Essential will be implemented in their school. This identifies timelines, resources and responsible staff.

monitors student fulfilment of college entrance requirements; oversees post-secondary education applications; and provides information on financial aid. The post-secondary-related role is stronger at the senior level compared to the middle-school level.

Members of the site team are collectively responsible for promoting AVID methodologies and for creating a site plan to implement the AVID program in their school. According to the Teacher/Coordinator Guide (Swanson et al., 2004; hereafter "the Guide"), they should be committed to all students having access to AVID learning strategies and to mainstream school activities. The long-term aim for the site team is to promote school-wide change and the spread of AVID strategies throughout the whole school.

Evaluation Research

SRDC—Research Consultant

The MoU specified that a subcontractor would carry out the evaluation jointly with the Foundation and the Ministry. This subcontractor would provide advice and support to districts for the research project both via the Ministry and directly, including training for recruitment-related research tasks and provision of frequently asked questions and a toll-free line for research project enquiries. In addition, the research consultant has:

- advised on AVID pilot site selection;
- randomly assigned AVID-eligible students to program and control groups;
- conducted site visits to undertake observational studies and interviews for implementation research, including student selection procedures at a subset of schools;
- collected data to help estimate the costs of AVID for a full cost–benefit analysis;
- periodically surveyed students participating in the study; and
- analyzed survey and administrative data to determine the impacts of AVID on BC students.

SRDC, a non-profit Canadian research organization, is the research consultant subcontracted by the Foundation to carry out these research responsibilities.

SRDC drafted a design report to develop the research framework to answer the key questions required of the evaluation. It participated in the recruitment of schools and student volunteers, including development of all procedures necessary for securing the informed consent and baseline data from the students and their parents or guardians. It has been responsible for managing the ongoing collection of data on outcomes and implementation, gathering information for the cost–benefit analysis; and will be responsible for publishing the findings in early implementation, interim impact and final impact reports.

The evaluation, as laid out in the MoU, includes implementation research to study the process by which AVID is introduced and to extract good practice lessons and a cost–benefit analysis. The longer-term research objectives and outputs are described in Chapter 8.

POLLARA—Research Subcontractor

SRDC subcontracted some research tasks to POLLARA, a company with expertise in telephone and Web surveys. POLLARA assumes responsibility for telephone interviews and surveys at different points throughout the project.

ESTABLISHING THE PROJECT INFRASTRUCTURE

The way project partners described above have worked together during the course of the project has evolved over time. The project grew from an initiative of the Foundation to test a new approach to increase access to post-secondary education focused on student achievement. Its initial explorations identified the work of the AVID Center, which, in turn, brought the Foundation into contact with the Chilliwack School District. The idea of trying out AVID on a larger scale resonated with the Ministry's goals to improve student achievement in the province and to promote a high-quality, performance-based education system. These informal connections became formalized over time as the province expressed interest in working with the Foundation on the BC AVID Pilot Project.

Project Governance

The project governance of the BC AVID Pilot Project is outlined in the MoU between the Foundation and the Ministry, and it primarily involves the ASC.

AVID Steering Committee

The ASC was established in late 2003 to advise and guide the Foundation and the Ministry on the BC AVID Pilot Project. ASC includes representatives from the AVID Center, Chilliwack School District, the Ministry, the Foundation and SRDC. The roles and responsibilities of ASC are outlined in the MoU between the partners, which establishes ASC as the sole decision-making body for the BC AVID Pilot Project.

Within ASC, specific roles were assigned to some members (see Table 3.1). The Foundation appointed the project manager. A former teacher and administrator from Chilliwack School District with experience implementing AVID was appointed project leader. For the first two years of the project, the former principal of an AVID secondary school assumed the role of field-based coordinator to assist with BC AVID site and program development.

The role of ASC is to oversee the research objectives and the implementation of the BC AVID Pilot Project. As a committee, the group engages in ad hoc, face-to-face meetings and weekly/monthly teleconference calls to discuss many issues, including:

- program design elements and coherence among them;
- broad policy issues and implications;
- research activities;
- administrative direction; and
- development of overall communication strategies.

Meeting minutes reflect ASC decisions and reports on actions taken. Decisions are reached through consensus between the MoU signatories, and attempts are made to establish consensus among other agents and partners involved.

Subcommittees are created on an ad hoc basis. In the early stages of the project, the Ministry established a school selection subcommittee to select the districts and schools to take part in the project. ASC also created a communications subcommittee to address communication needs of the project.

Communications Subcommittee

The communications subcommittee is made up of the project leader, project manager and representatives from the Ministry, SRDC and Chilliwack School District. This committee is responsible for the development of the overall communications strategy for the BC AVID Pilot Project, including tasks relating directly to:

- supporting participating schools and districts with recruitment efforts;
- explaining to participating schools and districts what is expected from them in the implementation of the AVID program model and the research evaluation framework; and
- evaluating what is needed to adequately respond to the queries from participating schools and districts.

The committee reviews materials intended for local site teams to ensure the appropriateness of content, consistency of language and information and province-specific information. This group was also responsible for the development of a Project Operations Manual to guide sites in the implementation of the project.

School Recruitment and Selection

A critical early phase of the project was identifying the BC school districts that would take forward delivery of BC AVID. In November 2003, the Ministry implemented a request for proposals from districts that was designed with input from ASC members. The Ministry sought out school districts interested in implementing the project at one or more schools as either random assignment or case study sites. To raise interest in this Request for Proposals, BC school districts were given an introduction to the project at a meeting held in February 2004 in Chilliwack. At this meeting, there was some hesitation about aspects of the research design involving random assignment of students. Nearly half the district representatives, however, expressed a preference for this design over an alternative that would have seen the program implemented at some interested schools but not at others.[26] School districts expressed concerns about how to fund necessary expenses, such as the district director position, and were unsure how to secure buy-in from their districts. The tutorial component was thought likely to be difficult for those schools outside urban centres—rural districts could have difficulty locating and training appropriate tutors. The amount of work for the teachers also raised some concerns. Nonetheless, the meeting ended with cautious optimism that most districts in attendance would apply to take part.

School Selection

The Ministry received 28 applications for individual BC AVID Pilot Project sites. Along with a selection subcommittee of ASC members, it evaluated the submissions according to set criteria. This committee made recommendations to the Minister of Education regarding final site selection. Districts were formally notified regarding the selection in June 2004.

Districts could apply for one of two research options: case study sites (two to four sites) or random assignment sites (15 to 17 sites). The selection committee considered geography and school size, and the decisions made about case study and two-cohort design were based on the best information at the time.[27] Most regions of the province (Vancouver Island, Lower Mainland, Interior and North) were represented in the final set of sites selected. The committee, however, had hoped for applications for schools in large urban districts with high proportions of students from families with lower socio-economic status (SES), since AVID had originally been developed for such schools. In the absence of many applications of this kind, schools with smaller student populations and higher SES were selected. There was a risk that there could be smaller numbers of AVID-eligible students at such schools, with implications for recruitment (see Chapter 4).

Four case study sites and 14 random assignment sites were selected, located within 15 school districts. These 18 sites represented 21 schools due to some sites being combinations of secondary or senior secondary schools and the middle schools that were their feeder schools. Other schools (additional to the 21) were involved in the project for recruitment only (where the project site was a Grades 9 to 12 school with a Grade 8 feeder school). The different school permutations represented in the project are illustrated in Table 3.2.

School District Agreements

All project-selected districts entered into agreements with the Ministry in order to participate in the research project and to receive project resources to support implementation of BC AVID. As part of the agreements, school site teams were required to undertake activities that support the research components of the BC AVID Pilot Project, in addition to delivery of the AVID program. For example, pilot project schools had to assist in recruiting study

26 This alternative design involved random assignment of individual Grades 9 to 12 sites, rather than individual students, to a program group that would be resourced to implement AVID and a comparison group that would not. With this design, which would have required the participation of more schools than the eventual design, impacts could have been estimated for a number of outcomes, including transition rates to PSE across all students at the schools.

27 Despite their smaller size, case study sites did not necessarily have problems attracting applications from sufficient numbers of eligible students. Because this was hard to predict, the case study model was deemed appropriate for four smaller, more rural sites for a number of reasons, including location and school size.

Table 3.2: AVID Participating Sites and Associated Feeder Schools

	BC AVID Pilot Project program delivery years					
	Recruitment	1	2	3	4	
	Grades					
Exemple sites	8	9	10	11	12	Number of sites
A						9
B						5
C						1–BC AVID in all schools
D						1–BC AVID in all schools
E						1–BC AVID in all schools

Note: "Site" refers to each high school or combination of middle and high schools that offers the AVID elective for the same class of AVID students across Grades 8 to 12. The majority of the BC AVID Pilot Project sites were like site type A. Site types C, D and E require AVID students to switch schools following Grade 9 (sites C and D) or Grade 10 (site E) of AVID.

Legend:
A = one high school with students in Grades 8 to 12 attending.
B = two schools: one middle school (Grade 8) feeding into one high school (Grades 9 to 12).
C = two schools: one middle school (Grades 8 to 9) feeding into one high school (Grades 10 to 12).
D = three schools: two middle schools (Grades 8 to 9) feeding into one high school (Grades 10 to 12).
E = two schools: one middle school (Grades 8 to 10) feeding into one high school (Grades 11 to 12).

participants. As part of recruitment and selection, the site team would administer the informed consent to new students and tutors, ensuring that the fundamental research tenet of informed participation was preserved.

Schools had to agree to share data as authorized by the informed consent of the participating students and their parents. Principally, this refers to the release to researchers of information from administrative records—for example, student attendance, course choices and grades. These data are the subject of separate data-sharing agreements between each district and SRDC.

Ongoing responsibilities taken up by the site team include collecting and entering data on SRDC data collection forms and updating SRDC with changes in class composition and additions or departures to the research cohorts.

In order to participate, schools had to be willing to allow regular scheduled access on the part of researchers to conduct observational field research in the AVID classroom. This research includes observing students taking part in the program and interviewing students and staff. Such access is essential to the implementation research, which, in turn, is integral to the demonstration project.

Finally, schools were asked to facilitate the collection of survey data. For the most part, this meant assisting in administrative duties associated with surveys of students—both those in program and comparison groups being tested.

PROJECT DESIGN ISSUES FOR AVID IN BRITISH COLUMBIA

With the basic infrastructure to deliver the project in place, further key elements of the project design could be finalized and communicated. The design of the BC AVID Pilot Project was a complex process requiring collaborative work between the many research partners and stakeholders at various institutions—organizations that had not necessarily worked together extensively before the project.

Although AVID was a well-established public school program in the U.S., some adaptations and clarifications would be necessary for the project to meet its objectives. The AVID Center in San Diego had identified specific processes of implementation to be set up in each school offering the AVID elective. The challenge for the project was to be able to use the AVID Center requirements as a basis for BC AVID implementation and adapt them for use in a Canadian context while staying true to the Essentials.

A few key elements of the AVID program required special consideration when adapting it to the BC context:

- Existing provincial Ministry of Education high school curriculum requirements include Planning 10 and the Graduation Portfolio,[28] which overlap with AVID.
- High-school-level assessment in BC incorporates relatively few standardized tests compared to U.S. high schools. There are provincial exams in Grades 10 to 12, but no college-required assessment directly comparable to SAT, PSAT or other College Board-administered tests.
- Post-secondary education in BC (and elsewhere in Canada) is much broader than the AVID focus on four-year colleges in the U.S. Thus, the AVID counselling and program information regarding these different options for PSE needed to be developed to suit the needs of the project.
- Differences between the BC AVID Pilot Project research requirements and the AVID Center data collection and certification process have meant more data collection than is typically associated with AVID occurring in the BC schools participating in the pilot project.

Each of these differences is reviewed below.

Curriculum Design—Planning 10

AVID is a district-approved course in Grade 9. For later years, in order for students to earn credits for AVID, the class requires Ministry review and Board Authority Authorized (BAA) approval.[29] For example, the Ministry has specific requirements regarding the high school credits required for students to graduate. Credits are required for Planning 10. Planning 10 has some content and learning outcomes that overlap with or are similar to AVID. Given this overlap, pilot sites in the BC AVID project have designed a curriculum for Grades 10 to 11 that combines AVID and Planning 10 into one seamless course for each of these years (see Text Box 3.1).

Schools in the pilot project are delivering a BAA course that merges learning outcomes for the AVID elective and those of Planning 10. Similar BAA course approval will be needed for Grade 12 AVID, as delivered in pilot project schools.

Work on the curriculum is centrally coordinated by the project leader but relies heavily on the expertise located in districts. Districts must develop their own class outlines, but these can draw on materials circulated between participating districts. The design of the curriculum is just one area in which project sites collaborate to help develop BC AVID.[30]

Text Box 3.1: AVID Curriculum Plan in British Columbia

There are three issues affecting the curriculum design of AVID in BC in terms of the integration of Planning 10:

1. AVID is required by the AVID Center to be a linear course, and it is recommended to be offered for at least four years before graduation. In other words, the program needs to be offered continuously throughout the school year in Grades 9 to 12.
2. AVID students in BC are required to complete a four-credit Planning 10 class, typically taken in Grade 10. The class would fill the only elective space that Grade 10 students preparing for PSE have available. There were concerns that this could be a barrier for students when they are assessing the merits of continuing with the AVID program.
3. There is considerable overlap in intent and outcomes between AVID and Planning 10 in terms of preparing students for PSE.

Solution: For BC AVID implementation, AVID 11 and Planning 10 are combined, and the requirements for both classes are met over two academic years, in Grades 10 to 11. In other words, AVID 11 and Planning 10 are combined into a single, linear four-credit course.

In Grade 10:	AVID 11A (two credits)	+	Planning 10A (two credits)	=	four credits
In Grade 11:	AVID 11B (two credits)	+	Planning 10B (two credits)	=	four credits

The result is that students can receive four credits of Planning 10 and four credits of AVID 11 toward meeting graduation requirements. Note: AVID 10 is taken in the elective slot in Grade 10.

28 Graduation Portfolio has since been replaced by Graduation Transitions.
29 BAA courses are courses offered by school boards according to requirements set by the Ministry. BAA courses can be used to fulfil a proportion of the elective credits required to graduate.
30 Another is the sharing of lesson plans between AVID teachers.

Standardized Testing Requirements—British Columbia Versus the SAT Model

While U.S. colleges and universities commonly require each entrant to have a certain minimum score on the College Board-administered SAT (Standard Aptitude Test) or on ACT exams, in Canada there is no such overarching equivalent exam requirement for entry into post-secondary education. BC high school students, however, participate in provincial standardized exams in Grades 10 to 12, and these grades can influence their access to post-secondary programs. The strong emphasis in AVID on preparation for SAT (or ACT), PSAT and advanced placement (AP) courses will seem less relevant in BC schools and to BC students. While BC students might still benefit from enrolling in these tests, it will be more difficult for pilot schools to promote these as essential, given the admissions requirements of BC and Canadian universities.

The Definition of Post-Secondary Education in British Columbia

In BC, an integrated and complex credit-transfer system includes around 200 private accredited institutions and 26 public accredited institutions. This unique structure makes it easier for students to transfer from a community college to a university or other degree-granting institution. There are many institutions in BC that combine attributes of college and university—institutions that are more clearly separate and distinct in the U.S.

Partly because of this integrated system, the BC AVID Pilot Project defines successful outcomes broadly, encompassing increased access to post-secondary education, including private vocational institutions, apprenticeship programs, colleges, university colleges and universities (only programs in the latter two categories can be readily equated with four-year college programs in the U.S.). While AVID, generally speaking, is intended to encourage students to make choices that keep as many doors open to them as possible upon graduation, this difference between the Canadian and U.S. school systems needed to be taken into account in the design of the project.

Research and Data Collection Requirements

The evaluation design inevitably imposes some restrictions on how AVID can be implemented in schools. One of those restrictions is that the 21 schools delivering AVID as part of the pilot are obliged to implement AVID in a more standardized way than is typical across AVID sites. The project issued its own guidelines in a Project Operations Manual covering procedures from student selection and curriculum delivery through to data collection and reporting.

Clear roles have been identified for both the district and school involved in implementing AVID and for those participating in the evaluation of AVID. For example, AVID Center data collection is part of AVID implementation but separate from BC AVID Pilot Project evaluation.

Districts needed to know ahead of time that their participation in the pilot project would place demands upon their schools over and above those of other non-project AVID schools. In order to participate, applicant schools must agree to co-operate with the evaluation and find ways to meet AVID certification requirements. For example, AVID Center requires AVID to be offered every week throughout the school year, but some schools typically offer semestered schedules where courses run for half a year only. These schools would need to timetable AVID accordingly. Schools must also schedule AVID in the blocks of time allocated to the AVID curriculum according to the following ratio: 40 percent curriculum class, 40 percent tutorial class and 20 percent motivational activities.

The AVID Center certification requirements were designed with U.S. schools in mind, and they do not always translate readily to the BC context. Still, as the above and other design issues in the pilot project delivery were resolved and procedures appropriate to BC were developed, these were communicated to participating sites. The main vehicle for this exercise was the Project Operations Manual (discussed above and below), provided in successively updated versions to all site teams. ASC created opportunities to train site team members in elements of project procedures that were critical to project implementation, such as recruitment workshops (described in Chapter 4). The procedures were also circulated to all site teams. Annual site team conferences provided opportunities for ASC to update teams—and for site teams to update each other—on new developments.

PROJECT OPERATIONS MANUAL

The BC AVID Pilot Project Operations Manual was authored and reviewed by the ASC communications subcommittee. The Project Operations Manual was developed gradually over the course of the design phase of the pilot project, in order to account for the implementation issues identified along the way. It contained recommended practices for sites implementing BC AVID as part of the project on most aspects of program implementation, as illustrated by the Table of Contents (see Text Box 3.2).

The project manager and project leader are responsible for ensuring the delivery of the BC AVID Pilot Project in accordance with the Project Operations Manual. The recruitment and selection process is covered in Chapters 4 and 5 of the manual and summarized in Chapter 4. Chapter 5 of the manual outlines data collection procedures to monitor class activities, student and tutor attendance. The results of this data collection for Grade 9 activities are presented in Chapter 7. Class and tutorial activities (see Chapters 6 and 7 of the manual) are reviewed for Grade 9 AVID program delivery in Chapter 6. Later research reports will capture the delivery of program activities for later years of project implementation.

Text Box 3.2: Project Operations Manual—Table of Contents

The project leader and SRDC are responsible for ensuring site teams remain familiar with procedures outlined in the manual. For example, Chapter 2 deals with appropriate handling of personal data on students. The project leader and SRDC both document questions of clarification relating to project delivery from local site team members and bring these questions along with possible answers to ASC. The project leader is responsible for documenting answers given to site team members or community members making inquiries about the BC AVID Pilot Project.

Chapters 7 and 8 of the manual, as well as some of its appendices, are concerned with the delivery of support to districts in the form of professional development and feedback on program delivery. These aspects of project design are outlined in the following two sections of the present chapter.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES AS SUPPORT

The project needed to ensure that the site teams and district directors received AVID professional development. The AVID Center offers a range of professional development opportunities for districts, schools, teachers, administrators and counsellors: AVID awareness, program planning, leadership development, AVID Path and teacher training, administrative training for principals and national events, such as conferences and the AVID Summer Institute. At the outset of the project, however, nearly all AVID Center programs were run within the U.S. Many of the most appropriate training events for initial site development were run in California, such as the International AVID Summer Institute in San Diego. The project sought ways to ensure that distance was not a barrier to the necessary AVID training.

Participating staff involved in the pilot project were funded for travel, accommodation and fees to attend training in the delivery of components of AVID and BC AVID at several professional development events in the U.S. (most often summer institutes, usually in San Diego) and locally in BC (mainly in Chilliwack).

Required training events for pilot sites included the U.S.-based AVID Summer Institute (for teachers, coordinators, administrators and counsellors) and AVID District Leadership training (for district directors) that ran its initial modules in Chilliwack. AVID Path Training sessions, Student Success Path training, AVID Awareness and AVID tutorology (recruitment and training of AVID tutors) have also been run in BC.

The AVID Summer Institute Training, San Diego

The AVID site team for each pilot project school attended the AVID Summer Institute held in 2004–05 and sometimes in later years as well. Their initial training focused on program planning, delivery and support or guidance regarding the implementation of the 11 Essentials required for AVID certification.

The AVID Summer Institute is a five-day training conference with four half-days (mornings) devoted to training in strands (subject-specific training) and four half-days (afternoons) in workshops with site teams (planning for the implementation and development of AVID in the school for the coming year), plus an introductory morning session. New site team members are introduced to AVID while other participants choose from higher-level AVID strands that broaden their understanding of AVID methods.

The AVID Center trains tutor trainers who, in turn, train AVID tutors. Tutor training provides opportunities for high school and college students to learn about AVID and to hone specific tutoring skills for AVID tutorials. Tutorial classes provide support for the delivery of the program and could provide useful experience for those interested in pursuing a career in education.

Chilliwack-Based Training—Path and ADL

Chilliwack School District offers an annual two-day Path Training conference for all AVID educators in BC, including those not involved in the pilot project. The sessions offer participants an in-depth foundational understanding of AVID materials, such as the Strategies for Success, the Student Success Path and the curriculum for AVID core courses, such as math, science, English and social studies. Presenters are AVID staff developers from the U.S. and Canada. BC teachers and administrators have the opportunity to develop ideas and program designs for the BC implementation during the workshops.

Ten AVID District Leadership training modules are delivered over a two-year cycle to district directors. Under an initial agreement with the AVID Center, the first eight modules were delivered to the first cohort of BC AVID district directors in Chilliwack. The final two modules were delivered in San Diego.

Project Information and Training Sessions

As a complement to the professional development opportunities to support AVID in BC (above), participating staff also were offered professional development addressing the project design.

Throughout the beginning stages of the project, SRDC described and explained the research aspects of the project in presentations to district and school personnel who were either potentially to become or already identified as BC AVID Pilot Project site teams or district directors. Alongside Foundation and Chilliwack School District personnel, SRDC also delivered workshops for these educators covering various research issues, such as: recruitment and selection procedures; administering the informed consent to students, parents and tutors; completing and submitting data collection forms; and the importance of classroom observations.

MONITORING, FEEDBACK AND SUPPORT

BC AVID Pilot Project Monitoring—Support and Feedback Strategy

The AVID Center has its own annual certification process based on written reports from each AVID school or district director, but ASC considered this process too infrequent for the purposes of a research study where effective implementation of the program would be necessary from the outset. It is important to the pilot project to be able to identify and provide support for any emerging issues at an early stage and not just at the end of each implementation year. Thus, ASC developed a set of guidelines for a support and feedback strategy specific to the research project.

One focus of the BC AVID Pilot Project is to determine whether AVID students receive four years of high-quality AVID program exposure. The aim was to develop an ongoing support and feedback strategy that would:

- be involved;
- report frequently; and
- return recommendations to sites.

Because the pilot project requires comprehensive evidence of effective program delivery, a process to complete regularly a support and feedback checklist was established by ASC in the Project Operations Manual for monitoring and support.

BC AVID Support and Feedback Checklist

Commencing in early 2007, the project leader began field observations using the support and feedback checklist to monitor how the implementation was proceeding at each site. The checklist referred to the Essentials (see Chapter 2) and specifically looked at: the AVID site or vertical team, the learning environment and the instructional techniques and learning strategies used in the AVID classroom.

The implementation of the support and feedback checklist included sending reports to site teams and following up with schools to help them more effectively implement AVID. The report was intended to encourage sites to identify any gaps in their implementation and to assist them in identifying strategies to fill them. It has become a useful channel for sharing information and has fostered a cross-pollination of ideas among sites. The checklist also acts as an early warning system for any problems or areas of concern regarding implementation. The AVID elective teacher has the opportunity to provide comments on the completed report.

The checklist was designed based on the Essentials, core requirements and expectations and specifically looks at aspects of AVID in action, such as:

- Site team—Are they trained, meeting regularly, committed to implementation and developing the site plan?
- Learning environment—Is it motivational? Career- or college-focused? Is there evidence of AVID?
- Instructional techniques—Are the student binders organized? Are WIC-R strategies in use? Are tutorials regularly scheduled? Is the AVID library being used?

Observations in the checklist are categorized. Evidence of each of the expected activities is either observed or not observed during the site visit. A key distinction is made between situations where there was an opportunity to observe an Essential and it was not observed and where there was no feasible opportunity to see the Essential in question.

Some key issues that emerged from early stages of the support and feedback process included: AVID staff turnover at pilot sites; the commitment of school administration to the AVID program; and the overall impact of AVID on the school as a whole over time. The ongoing implementation of the checklist is important to understanding the range of implementation issues, what strategies are effective and what might be missing where sites are struggling with certain aspects of the program design.

Monitoring of Research Procedures

Under the scrutiny of ASC, SRDC monitored the achievement of objectives related to ongoing research activity and data collection. This was accomplished by following up with educators and other school staff in interviews and on site visits, in order to establish, for example, the policies regarding participant recruitment. It also involved establishing informed consent for tutors and new students and protecting the confidentiality of personal data shared with SRDC, which offered training presentations to teachers covering the main issues of participation to ensure that administration of the informed consent was effective.

SRDC uses a summative evaluation model in this project. The intent is to focus on broad lessons, in the longer term and across student-teacher populations—not to pick out specific instances to change or eliminate. The latter function is the role of the feedback and support strategy.

IMPLEMENTING BC AVID

Chapters 1 to 3 have been concerned with the development of the pilot project. Chapter 1 assessed the rationale for testing an intervention to increase access to post-secondary education based on student achievement. Chapter 2 revealed in more detail the complex nature of the AVID program—specifically the AVID elective that would represent the intervention in BC AVID. The present chapter has outlined the organizational structure established to implement the project in a way that is appropriate to its BC context and the instruments—research design, Project Operations Manual, professional development and related meetings and workshops, support and feedback strategy—developed to ensure the project would meet the research aspirations outlined in Chapter 1.

In scope and design, the project had few precedents in educational research in Canada and posed unique implementation challenges. Chapters 4 to 7 begin to tell the story of how this implementation proceeded and of the successes and challenges encountered putting the project design in place. Chapter 8 also looks forward to the more complete story of implementation, the impacts of BC AVID and its cost-effectiveness, which will be available in the final project report.

4

The BC AVID Pilot Project Participant Recruitment and Selection Process

Introduction

The present chapter sets out the challenge that the selective nature of the AVID program poses to evaluation and how the BC AVID Pilot Project has attempted to overcome this challenge. The profile of AVID-suitable students and methods available for identifying such students in the current project are reviewed. The chapter describes how the project took active steps to try to standardize the recruitment and selection process and how it implemented random assignment of the identified AVID-eligible students to enhance the rigour of the resulting evaluation. The implementation of the project's recruitment and selection procedures is described, together with evidence from fieldwork and interviews with members of school site teams on how the process worked in practice.

CHAPTER SUMMARY

- **Recruitment and selection are fundamentally important to the operation of the AVID program and to its evaluation in this research project.** The project has adopted random assignment of students who are eligible for the program to ensure that impact estimates do not confuse the effects of selection on outcomes with the effects of the program itself. The project has attempted to ensure that a standard process is used to identify AVID-eligible students at project sites in order to make sure that AVID requirements are followed and to aid explanation of what the impact estimates mean.

- **The project developed a standardized recruitment and selection process.** A committee with members from the AVID Center, Chilliwack School District and SRDC designed procedures for BC modelled on existing selection processes for an AVID school district in Texas. The project provided training and support, a Project Operations Manual and standardized application documents to assist schools with implementing the procedures.

- **Recruitment and selection involved several stages and was resource-intensive.** AVID site teams worked in winter and spring of 2005 (and winter and spring of 2006 at sites with two cohorts) to recruit and select AVID-eligible students. During depth interviews, site team members commented on the intensity of the work involved, especially at the interview stage.

- **AVID-eligible students were assigned to program, comparison and waiting list groups that would determine whether and how they were offered a place in the class.** Students who volunteered to participate in the project and were determined to be AVID-eligible were assigned to one of up to three research groups. The program group was offered a place in the upcoming Grade 9 AVID class. The waiting list group would be offered a place when a vacancy arose. Comparison group members would not be offered a place in the AVID class. At case study sites, site team members assigned membership of the first two groups only. At random assignment sites, SRDC assigned students to all three research groups using a lottery-like process.

- **Recruitment and selection was successful in recruiting sufficient numbers of eligible students.** In total, 1,522 project participants were recruited across the 18 BC AVID Pilot Project sites. Site team members varied in their assessment of the suitability for AVID of the students selected as AVID-eligible.

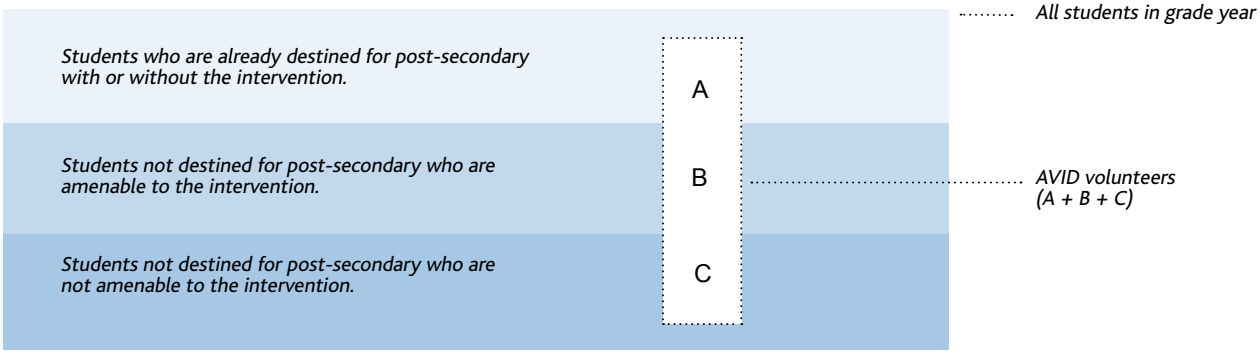
THE IMPORTANTANCE OF RECRUITMENT AND SELECTION

Selection of participants is critical to the success of AVID. The offer of a place in the AVID elective is not expected to change post-secondary outcomes for just any student, and this importance has fundamentally influenced the design of the research project. The two principal influences on the project are described below.

First, the project had to ensure that it calculated the effect of the program itself on those selected for it—i.e. separating the program's effect from the effect of the selection process. As explained in Chapter 1, the project seeks to determine whether the offer of four years in the AVID elective has an impact on access to post-secondary education for those eligible to receive such an offer. Determining such eligibility involves AVID site teams engaging in a selection process based on students' characteristics. Any such selection poses a challenge for evaluators because the characteristics used to determine eligibility for the program could also be characteristics that also—independently of the program's impact—affect access to post-secondary education. Evaluators need to control for these selection effects to draw valid conclusions about the impact of the program. It would only be appropriate to judge the effect of offering the program on the outcomes of students against the outcomes of students possessing the same characteristics as those offered it. To identify both of these groups precisely for the project, they needed to have gone through—and been found eligible by—the same recruitment and selection process. Once found eligible, the students could be assigned to a research group to be offered the program (called the program group) or to a group not offered the program to which the program group will be compared (called the comparison group). The best way to do this assignment is to use a random process, since using a non-random process would risk introducing additional selection effects. This random assignment design was adopted at 14 of the 18 project sites (called random assignment sites).

Second, the project needed to give BC AVID a fair test. To do this, it was important that program group members offered the program (and by implication the comparison group members also) were students who could stand to benefit from the offer of the program. To include students who could not benefit would be to reduce the chances that the program would be found successful. Of course, selection of the "right" students is also important to the normal operation of AVID. Consequently, the AVID Center provides guidelines, support and training for recruitment and selection. The project aimed to harness these guidelines to develop a student selection process appropriate for BC. In other words, the project determined what the actual BC AVID Pilot Project eligibility requirements would be and ensured that they could be applied to BC students. The following sections review in more detail this challenge of getting selection "right" for BC students and how this challenge was addressed.

Figure 4.1: The AVID Selection Challenge



What It Means to Get Selection "Right" for the BC AVID Pilot Project

Selecting the right students for a program is difficult but necessary. The offer of a place in the elective will not change whether some students access PSE. In other words, the AVID elective is intended to change PSE access outcomes for some types of students but not others. Should the program be offered to students who are already destined for PSE—by virtue of their academic skills, motivation, hard work or even luck—then the program can have no impact on their PSE access.[31] Should the program be offered to students who are (in the absence of the program) not destined for PSE, it could have an impact, but only on those among them who are amenable to the program. If the program is offered to students not amenable to the program, it cannot have an impact.[32]

Figure 4.1 illustrates this selection challenge. Students are divided into the three groups described in the paragraph above. Students that volunteer to be considered for AVID, shown in the diagram as groups A, B and C, are a subgroup of all students. The middle group (B) is the group upon whom AVID is anticipated to have an impact. Educators charged with selecting students will not be able to forecast outcomes perfectly, so when they select students they could by accident or even by design include students from all three groups.[33] Still, the program's impact will only be realized for students in group B. The higher the proportion of students in groups A and C in the class, the lower the program impacts will be. This, however, could not be apparent outside of an experiment. If the proportion of students selected for the class and in group A, already destined for PSE, is high enough, the program is still guaranteed positive outcomes. Students from the AVID elective will be seen to go on to PSE. By definition, however, these students from group A would have accessed PSE even without AVID. Allocating seats to them for four years might not represent an efficient use of scarce places in the class, if the program actually has its impacts on students from group B. More to the point, helping group A students does not solve the PSE access problem described in Chapter 1.

Since the program could only have its impact upon students not already destined for PSE and who are amenable to its effect, these students represented the target of recruitment and selection for the project. Nonetheless, this group of students would be hard to discriminate from others in Grade 8 since the identifying characteristics—students' response to the program and PSE access—would not have been observed. Selection committees at schools would have to use proxy indicators to identify the students not destined for PSE but among whom the program will change this outcome. The project, like AVID more generally, needed to try to get this tricky task of selection right, based on proxy indicators.

Identifying AVID Student Selection Criteria

The AVID Center has long recognized the importance of student selection to the success of the program. AVID Essential 1 states, "AVID student selection must focus on students in the middle, with academic potential, who would benefit from AVID support to improve their academic record and begin college preparation." The Center's materials identify several proxy indicators for the kinds of students upon whom the program is expected to have an impact. These materials formed the logical starting point for identifying the pilot project selection criteria.

The Teacher/Coordinator Guide (Swanson et al., 2004) outlines broad principles about who should be recruited and helpful suggestions as to how to identify them and where to find them. Some examples from the Guide include identifying students whose families did not attend college and recruiting students from the free or reduced lunch program, although the Guide does specify the relative importance of the principles. In addition, some of the principles or suggestions needed to be adapted for BC, which, for example, does not have a universal free lunch program for identified students from low-income families.

31 The primary outcome of interest in this project is enrolment in and completion of the first year of a PSE program. While AVID could have some other impacts—e.g. on choice of program or PSE persistence—on students already destined to complete at least one year of PSE, it cannot by definition have an impact on completing one year of PSE. Assuming AVID has no negative impacts on PSE access (i.e. converting students who will go to PSE into students who will not), all such students will achieve this outcome, with or without AVID. The scope for an impact on this outcome is zero.

32 Again, AVID could have some impacts on students who, even with AVID, are not destined for PSE. It could support them through high school and have an impact on exam results and graduation. By definition, however, the impact of the program on PSE access must be zero for students not amenable to its influences on their PSE access.

33 They could deliberately choose students already destined for PSE to act as a role model to others in the class. Alternatively, they could do it to establish a precedent for the program producing successful outcomes, even when these are not due to the program. As one AVID counsellor put it, "In a lot of ways, it would have almost been better to stack the first cohort with really successful kids, to get people believing in it."

The Need for Standardized Recruitment and Selection Criteria

No set of criteria is universally deemed necessary or sufficient for a student to be admitted to AVID and, in practice, the variety of factors that influences selection of students varies by school and site team membership. Students with the same characteristics could be deemed AVID-eligible in one round of recruitment and ineligible in another. If this were the case for the BC AVID Pilot Project, however, it would face the following challenges:

- It would be hard to say upon whom the program had been tested. The findings from the pooled impact estimates would not readily be applicable to any specific population. It would be difficult to know whether any negative results reflected an inappropriate choice of students or a failure of the AVID program itself. It would be hard for anyone to know how to go about replicating the results at future sites.
- Getting selection wrong. Appropriate selection is deemed critical for the success of AVID. It would be risky for the project to use many different processes to determine who the suitable students are. This risk is particularly high when site teams lack experience in selection.
- Constraints on correcting the class composition. The project design to test four years or AVID means that students cannot be added later to the research cohorts. This places increased importance on getting the selection right from the start.
- Parent and student complaints. If selection was markedly different between sites, unselected students (or their parents) could feel unfairly treated since they might have been found eligible for the project at a different site.

To try to avoid these challenges, the AVID Center, Chilliwack School District and SRDC developed a standard definition of eligibility by consensus. These criteria were approved by the ASC and put in the Project Operations Manual.

BC AVID PILOT PROJECT SELECTION CRITERIA

The selection criteria used a points-based system that weighted student characteristics to determine their suitability for AVID. Students more suitable for AVID received higher scores than those less suitable. Students above a certain level would be AVID eligible. No one factor would have sufficient weight by itself to determine eligibility. The scoring framework adopted for the BC AVID Pilot Project is summarized in Table 4.1

The professional judgement of educators is required at several places in selection (e.g. determining whether to refer students for AVID; assessing exactly how student attendance and behaviour records that vary by school are to be scored; scoring the student written component and interview). Standardization ensured that teams at each school addressed the same AVID suitability concerns when making subjective judgements and then accorded a similar weight to each equivalent concern.

Table 4.1: BC AVID Selection Criteria

		Maximum number of points
1.	*Letter grade average for all classes* *A or higher = 5; B to C = 20; D or lower = 0*	*20*
2.	*Standardized test scores* *(only for those with letter grade average of B or less)* *If the test score (e.g. Grade 7 FSA results) meets or exceeds grade expectations, give 5 points.*	*5*
3.	*Grade 8 attendance to date* *Good = 5; Average = 0; Poor = -5*	*5*
4.	*Disciplinary or disruptive behaviour history in current school year* *None = 5; Minor = 0 ; Major = "E" (excluded)*	*5*
5.	*Referral by teacher or self* *Teacher referral = 5 (maximum = 15); Self-referral = 5*	*15*
6.	*Student-written portion of application* *If the written portion is not submitted, mark "E" (excluded).*	*10*
7.	*Family post-secondary history* *Parents did not graduate from college/university = 10*	*10*
8.	*Special circumstances* *Single-parent family (recorded on application form) = 5;* *family of 6 or more (recorded on application form) = 5;* *ESL = 5; Aboriginal = 10; Other circumstance(s) = 5*	*10*
9.	*Interview* *If student did not attend and did not provide an excuse, mark "E" (excluded).*	*20*
	Total score *Cut-off level for project eligibility*	*100* *≥ 45, no "E"*

Combining AVID Selection with Random Assignment

In addition to proposing a standard definition of AVID eligibility, the committee also set out to ensure that the application and recruitment process would encompass all the required steps to locate AVID-eligible students, recruit them as project participants and assign them to research groups. This required additional steps when compared to a more typical AVID recruitment, including:

- recruitment activities on a scale sufficient to ensure that all eligible Grade 8 students at each school were located, since recruiting only a subset might prevent the school from forming a class of sufficient size as well as an equivalent comparison group.
- having students and their parents provide their informed consent to participate in the research project (information about the research project needed to be integrated into the recruitment information procedures); and
- additional data collection during and after recruitment for analysis as part of the evaluation.

IMPLEMENTING THE RECRUITMENT AND SELECTION PROCESS

The broad objectives for the recruitment and selection process were to recruit appropriate students and collect appropriate data. Required documents, from teacher referral forms to application packages, interview questions and scoring summaries, would be supplied to sites with a detailed set of procedural instructions and recommendations in the Project Operations Manual. Training sessions would be run to assist sites with the recruitment and selection process.

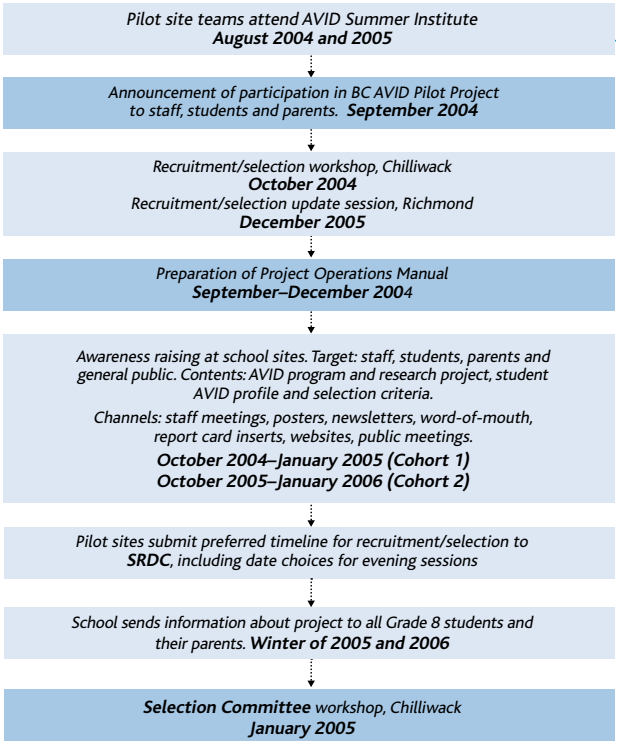
The central conclusion of the present chapter is that the broad objectives of recruitment and selection were met.[34] Schools obtained the resources, used them and were able to proceed with delivering AVID to a sufficient number of project participants. Educators typically were satisfied with the support the project provided in this area of project implementation and with how it proceeded, although they highlighted the amount of work involved and suggested changes. One teacher stated: "That whole process I'm actually quite proud of. There's [sic] probably little bits that we would still like to tweak, but I think it went as smoothly as it could for the first couple of years of the program."

The following sections review the recruitment and selection process for the BC AVID Pilot Project, from initial preparations during 2004 through recruitment and selection rounds in 2005 for Cohort 1 and in 2006 for Cohort 2.

PREPARING STUDENT RECRUITMENT AND SELECTION PROCESS

To become a project participant, each student had to meet the AVID eligibility requirements set out above and, in addition, had to complete the project's data collection and informed consent requirements. These activities had to occur in early 2005 (Cohort 1) and in early 2006 (Cohort 2) so that newly recruited program group members could start AVID classes in September of their respective years. Over the same period that these procedures were being developed, schools were being selected (see Chapter 3) and beginning their initial preparations for their first recruitment year. School AVID teams were briefed on the selection approach and given proposed timelines on site preparation, recruitment and selection activities at the school level. The final version of the timelines is shown in Figures 4.2 and 4.3.

Figure 4.2: Initial Site Preparation for BC AVID Pilot Project, 2004–05



Note: Darker shaded activities occur during initial recruitment year only (2004–05). Lighter shaded activities occur in both recruitment years (2004–05 for Cohort 1 and 2005–06 for Cohort 2).

34 Qualitative data derive from 31 field observations of information sessions, 55 interviews with site team members and notes from BC AVID training sessions and BC AVID conferences held in December 2005 and 2006. Administrative data are compiled from application forms and associated communications between schools and SRDC and between POLLARA, the organization capturing application form and survey data, and SRDC. The main sources of information about the intent of the process are the Operations Manual and observations of training sessions, plus two interviews with senior officials at the AVID Center. SRDC researchers developed protocols for notes and interviews to ensure that these data would be systematically gathered and able to address the question of whether or not implementation objectives were achieved.

Figure 4.3: Stages in Recruitment and Selection of Students for BC AVID Pilot Project

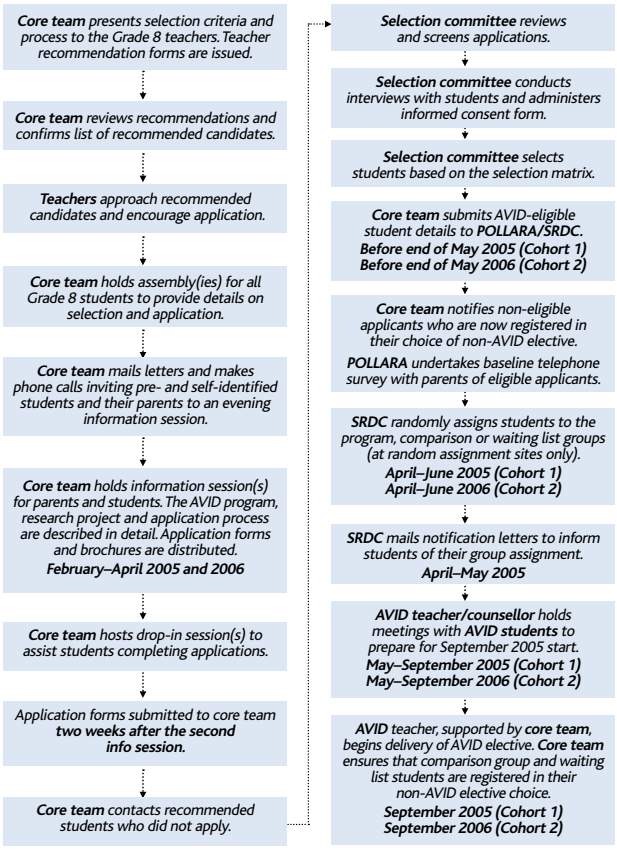


Figure 4.2 outlines the main stages for preparing site team members for the recruitment and selection process and for generating awareness at sites more generally among educators, parents and students. At the start of the initial school year of recruitment (October 2004), core members of the site team were invited to a workshop to learn about the recruitment and selection procedures.[35] This session reviewed procedures, site development and planning for recruitment. A later workshop in January 2005 focused on the procedures in Figure 4.3.

Several teachers commented on how the briefings helped them to grasp the scope of the tasks ahead. An AVID teacher and an AVID coordinator from different sites spoke for many when they reported that the procedures and selection had worked well:

> *And when I first started [...and] first went down to the (AVID) Summer Institute, they said, "Well, we're giving you a year to prepare," and I'm thinking, "Well, why am I going to get training when it's going to be a year before I can even teach the course?" Well, once I was down there and realized the course, I thought, "Wow! Now I know why we have a year." It was well done. The preparation for the selection and the application form, etc., it really helped us narrow [down] and get the right form of students. So, yeah, we were very happy with it.*

> *All of this stuff like application forms and interview forms and things that you've given us were really helpful. Talking to the American schools, when we went down to the Summer Institute...their main thing was: "We don't know what to do!" So all that stuff really made it easy for us to do.*

The AVID teacher at one site that had made efforts to recruit students in the year before the project formally started reported a big difference once they were using the project's procedures and training materials, stating: "For the research cohort—the second time—they actually used the questionnaire that was provided in the recruitment materials and the ranking system and the scoring system, and they found that really the scoring system does work."

The following sections describe, in chronological order, what AVID site team members were expected to do between fall and spring of each recruitment year.

Raise Awareness

The first step in program implementation and student recruitment was to raise awareness of the project, first among staff and then among students. Successful delivery of the AVID program and of BC AVID Pilot Project was unlikely without the support of staff, students, parents and the school district. These critical players could co-operate with and support the program and project only to the extent that they were aware of them and understood them.

In each recruitment round, school staff represented the first target for raising awareness. These staff would also include feeder school staff at sites where Grade 8 recruitment occurred at these schools. Site teams were asked to explain to all staff:

- how and under what conditions the school became involved in the project;
- what AVID was and was not;
- the purpose, methodologies and anticipated outcomes of the research project and the opportunity that they had to contribute to the body of knowledge about teaching and learning;
- the recruitment and selection processes, the central involvement of Grade 8 teachers and milestone dates of these processes; and
- the profile of the AVID-suitable student for whom AVID was designed.

For this purpose, schools were recommended to use video and other presentations at staff meetings, plus printed materials from the AVID Center. An AVID teacher at one school described how the school implemented a series of activities:

> *Coming back from our first summer in San Diego,...myself and a number of other teachers who were involved in the AVID summer program...put on a presentation for the staff on a pro-D day...extended staff meetings, professional development, some of the strategies we'd learned. We set up monthly meetings for the AVID steering group that were well attended—[with] free pizza and other perks.*

35 Core team referred to the principal, AVID teacher, AVID coordinator, and AVID counsellor at each pilot site.

Text Box 4.1: BC AVID Pilot Project General Characteristics of AVID-Suitable Students

Has Academic Potential

- Can succeed in rigorous courses with support
- Desire and determination to be successful at school
- C to B Average (2.0 to 3.5 Grade Point Average)*
- Average to high standardized test scores
- Appropriate classroom behaviour
- Good attendance
- Satisfactory work habits
- Does not receive additional academic support (e.g. Learning Assistance or a modified program)
- College/university aspirations

Could Have One or More of the Following Circumstances:

- First in family to attend college
- Member of under-represented minority at college
- Low income
- Single-parent/large families
- Other special circumstances

Source: Project Operations Manual: Recommendation of AVID Candidates
***Note:** According to the BC Ministry of Education Policy Document on Student Credentials,[37] this is measured on a four-point scale where 4.0 typically represents an A average, 3.0 a B average and 2.0 a C average. Correspondingly, an average can be calculated for any given set of grades using the following conversion: A = 4, B = 3, C+ = 2.5, C = 2 and C- = 1.

The second step was to raise awareness among students and parents by:

- displaying AVID posters in Grade 8 core subject courses and school common areas (posters identified the teacher that interested students should contact by name);
- encouraging Grade 8 core subject teachers to have general class discussions regarding the project;
- asking teachers to refer students to a member of the AVID team if they required more detailed information;
- featuring AVID in student newspapers, student and school websites, school newspapers to parents and inserts into report cards; and
- presenting AVID at a parent advisory committee meeting or at a parent night or open house event.

All sites adopted at least some of these steps.

District directors and site team members were also encouraged to ensure that school board trustees were fully informed about the project.

Generate Student Recommendations

This section describes the process for identifying AVID-suitable candidates and completing the recommendation forms. Following the initial phase of awareness-raising, the AVID team was to ask all Grade 8 teachers and staff[36] to identify and recommend students who fit the general characteristics of an AVID-suitable student, as derived from AVID Center materials by the project selection committee (see Text Box 4.1). Typically, the recruitment process illustrated in Figure 4.3 would begin with at least one meeting of teachers and other school staff where the general characteristics and process would be explained. The Project Operations Manual suggested a follow-up meeting to review and finalize recommendations, as well as convince the recommending teachers to encourage those students to apply.

The teacher recommendation procedures placed quite a lot of demands on teachers who had not necessarily been involved in the project or who knew very little about AVID, especially at feeder sites. One teacher described it as "quite an onerous task" for Grade 8 teachers who received "no real benefit for doing all this work." Still, the procedures were followed at every site.[38] The results were not always what AVID site team members expected, for several reasons. One was that despite their briefing, Grade 8 teachers (and particularly those based at non-AVID schools) had misconceptions of the program. An AVID coordinator stated:

36 The phrase "teachers and other staff" will be used in this section to refer to teachers of Grade 8 students, counsellors, administrators and other school support staff expected to be knowledgeable about the Grade 8 students in the context of completing the recommendation form.
37 Retrieved March 26, 2008, from www.bced.gov.bc.ca/policy/policies/student_credentials.htm.
38 There were some variations. For example, two sites during their Cohort 2 recruitment did not hold a second formal meeting of all teachers, but held an AVID site team meeting instead. "We went name by name through the list from there. So essentially it was a culling to see…'Are those students who have been recommended by this teacher…showing the same signs in all their other classes?'"

> *There is some misunderstanding from Grade 8 teachers about the type of student we are looking for in AVID.... Their impression is that an AVID candidate is a student that either needs learning assistance*[39] *or is a student that perhaps has emotional or psychological difficulties, and that student gets an extra boost with AVID....[A] lot of the videos that we got from AVID, particularly the ones from the States, would focus on kids that had been disenfranchised, the ones that come from poor backgrounds and have all of these issues, and so, in their mind, that's the type of student we're looking for.*

As Grade 8 teachers became more familiar with the program over time, this could create differences between recommendations for the recruitment of the two cohorts. An AVID teacher and an AVID coordinator from different sites stated:

> *They had the criteria, but they weren't as knowledgeable as they were this year, because now AVID students are actually in some of their classes.*

> *Teachers could look at the [Grade] 9s and go, "Oh, she is doing well and he is not doing well," and look at the kids who got in and be able to say "Oh, that is not who you are looking for. You are looking for this."*

Thus, it was possible that inappropriate candidates could appear on the finalized Summary of Recommended Students. This was important because students on the list were often given a personal phone call encouraging them and their parents to attend an information session. They were typically followed up if they did not attend the session or did not submit an application. Thus, inappropriate candidates could have been given additional encouragement to apply. While all candidates, including those who were not recommended but who came forward to make their own application, had to meet eligibility criteria to be selected for the project, the eligibility criteria attached additional weight to students with two or more recommendations.

The student recommendation process was easier to organize when the Grade 8 students being recruited were at the same school as the site team. This was not the case for at least four sites (depending on the recruitment year). At feeder schools, in addition to differences in teacher awareness, the averages on which recommendations of middle-achieving students might be based could require different interpretation. An AVID coordinator at a Grade 9 school learned about the Grade 8 feeder school courses, stating:

> *We made the assumption that a C- was just barely passing, much like it is here. Well, we have just learned that is not the case....At middle school, they are not allowed to give a failing grade. There is no retention. The kids have to move on to us in Grade 9. So they get a C-. So a C- is anywhere from a 59 percent bare pass to a zero.*

Despite complications and difficulties, all sites implemented the student recommendation process for each year of project recruitment and generated a list of recommended students.

Information Sessions and Application Process

The next stage in the recruitment process was the holding of information sessions, both during school hours and after school (with parents).

Student Assemblies or In-Class Sessions

The ASC felt it was important to inform all Grade 8 students in a direct and specific manner about the project before launching the application process. The AVID team for each pilot site was expected to present consistent, detailed information about the project by means of either a series of class visits or one or more Grade 8 assemblies. The objectives were: to allow recommended students to make an informed decision to apply; to encourage non-recommended students to apply; and to inform non-applicants about the project (see Text Box 4.2 for the content of these sessions).

In general, educators felt that class-to-class presentations were more effective than a full Grade 8 assembly, although at least one teacher who tried both felt the bigger meeting allowed more time to cover all the points. For Cohort 2, the presentation could incorporate testimonials from AVID students in Cohort 1. It seemed that potential applicants in Grade 8 appreciated the information about the program provided by their peers. According to an AVID administrator, "Really, ultimately, it's kids' word of mouth that's going to get kids interested in something."

Evening Information Sessions

The evening information sessions were organized by the site team and included a representative from SRDC. The sessions provided information to students and parents about the project and opportunities for questions to be answered and application packages distributed.

Invitations to the sessions, often with brochures, were mailed to all Grade 8 students and their parents or guardians. Attendance would be recorded in order to facilitate follow-up with students and parents who did not attend.

The evening information session covered the material in Text Box 4.2, along with information on the research, the informed consent and the application packages. AVID coordinators from two different sites described how this went:

> *I thought those were great, the information sessions....The parent session was well attended....Passing on the information wasn't a problem. That worked out well.*

> *Info night went much better than I'd expected. We had a nice, large turnout.... [T]here was very little overlap with teacher recommendations and showing up for the AVID night, which I found interesting.*[40]

39 The project committee chose not to exclude automatically students requiring learning assistance, even those with a learning disability, because of interschool variation in the designation. The committee did specify in the student recommendation procedures that these students were not to be recommended, although such students could still qualify if they were sufficiently AVID-suitable on other criteria. At least one school selection committee found the designation ambiguous, stating, "We found out some kids have...a learning assistance block that probably don't need it because they're using it as a homework block....AVID could replace that support in that case."

40 Grade 8 students who had an interest in the project but who were unable to attend the evening information sessions were given application packages and a mini-version of the session along with an SRDC DVD to explain the research.

Text Box 4.2: Recommended Content of AVID Information Sessions

About AVID:

- It is an elective for credit in each year from Grades 9 to 12.
- It has a "learning to learn" curriculum focusing on WIC-R.
- It provides support for taking the most rigorous courses of study in the senior years.
- It prepares students in terms of attitude and skills for college and university, including exploration of post-secondary opportunities, visiting colleges and universities and preparing applications.
- It is part of the regular timetable, with different kinds of activities on different days (curriculum, tutorials and motivational activities).
- The site team members who are involved in AVID and what training they have taken.
- The general characteristics for an AVID-suitable student and the project selection criteria. Not all students who apply will be found eligible.
- If selected, they will be expected to devote their time (giving up an elective each year, spending no less than two hours each evening on homework), to show commitment, dedication and persistence and to enrol in the most challenging academic courses.
- The potential benefits, which include: becoming better able to write, listen, speak, question, take notes, study, organize time and work with others; gaining support from AVID teachers and fellow AVID students; preparation to succeed in whatever post-secondary learning they choose to undertake; and an increased likelihood of achieving bursaries or scholarships.

About the research project:

- Participants, once selected, are part of a research project for a number of years that will help others by furthering understanding of what AVID can do for BC students.
- At random assignment sites a lottery-like process will be used to determine who among those eligible is offered a place in the class. Those assigned to the comparison group play a very important role in the research project and remain eligible for all existing school programs and services.
- If there are many applicants, a waiting list will also be created.
- Participating students will be required to sign the informed consent form, as will their parents or guardians, stating that they are willing and committed to participate in the BC AVID Pilot Project and, in addition, that they are willing to share information with researchers, such as their school grades and attendance and information about their career plans after they complete high school, including how they plan to pay for their schooling.
- Students are asked to complete a questionnaire as part of the application package. A parent or guardian will be interviewed by telephone. During their high school and post-secondary years, they will be interviewed two or three times by telephone or in person.

Source: Project Operations Manual

The Application Package

The application package contained an application booklet (with the informed consent form from the parent(s)/guardian(s) and the application form), a keep-at-home copy of the student's informed consent form and the student questionnaire. The completed questionnaire would be returned to the school sealed in an envelope that would not be opened until the application package reached POLLARA. Once the deadline for submission had passed—two weeks was recommended—an AVID team member was to check the applications and approach any recommended students who had not applied. In some cases, leeway on deadlines was given. AVID teachers at two sites had different experiences:

> *I think it went very well—and staff members I have talked to feel the same….[W]e had quite a few applications come in right on the deadline date. We had several students who we felt were AVID suitable and really wanted them to get their applications, and so even if they missed the deadline we made the phone calls….[T]here was a little leeway there.*

> *Some of the kids that were highly recommended [but] didn't fill out applications, and so their teachers or the [feeder school] staff kind of pursued them. I am not sure that was such a good thing, because those are some of the kids this year that really aren't exhibiting any real sense of commitment at all.*[41]

Another AVID coordinator found that some students dropped out at this stage, stating, "When we phoned back students [and asked], 'Where is your application?,' they would say, 'Well, I've chosen not to do it.'"[42]

Teams used information from the completed application forms to determine components of eligibility criteria before commencing interviews. The Project Operations Manual gave guidance on how each criterion should be scored, but some site team members found interpreting the rules a challenge. For example, an AVID teacher felt that the criteria were silent on some kinds of students that should have been excluded: "There needs to be some way of factoring in the kids that don't have major behaviour problems but do have behaviour problems that are going to get in the way of them being successful."

The most subjective score at this stage was the one attached to the student written portion of the application (criterion 6).[43] Members of the site team had to assess and score each student's written responses to the five questions in the application booklet. The coordinator or designate would take the average of all these evaluators' scores as the final mark for that student. Students' applications would be excluded if they had left the written portion blank.

The Interview

The interview is a critical and time-consuming component in AVID recruitment and selection (AVID Center, 2007). It provides an opportunity for the team who will be delivering AVID to meet those who would potentially receive it and vice versa. It allows additional information about each applicant to come to the fore that could help make decisions regarding AVID suitability. The interview process was time intensive, with an AVID coordinator stating, "We had days and days and days of interview[s], even though we knew those students would not be candidates, because we were trying to be inclusive of everybody."

The interview process set out in the Project Operations Manual—and enacted in training sessions—was designed to provide an environment where the student would feel safe, comfortable and willing to answer the interview questions. Various tips and suggestions were included to ensure that the selection committee would secure valuable information about the student through both verbal and non-verbal communication. The interviewers asked nine scripted questions,[44] as well as their own prompts, with the aim of receiving from the candidate all the information they needed to judge the following traits:

- motivation to achieve personal goals;
- determination and persistence;
- commitment to learning and undertaking learning challenges;
- efficacy, self-awareness and optimism;
- varied interests;

41 AVID Essentials (see Chapter 2) include ensuring that student participation in AVID is voluntary. To ensure that this was the case and that students were motivated to participate, the committee developing the recruitment and selection process left the onus on the student to submit the application.

42 The reasons recommended students gave for not applying were explored in a short online survey, discussed in Appendix D.

43 The five questions asked of students in the application form were:
1. Describe the goals that you believe AVID will help you achieve.
2. Tell us about any responsibilities you have in your home, school or community.
3. Describe activities that take up much of your time outside of regular class, such as athletic, recreational, musical, service, community or family activities.
4. Describe what you believe a successful student does in class and out of class. Also, explain what you believe you need to change about yourself to become like this successful student.
5. Describe what you have discovered about yourself as a learner, both in school and outside of school. Tell us about the way you like to learn, the subjects you like/dislike, what's difficult and what's easy.

44 The nine main interview questions were:
1. Tell us about something you are good at doing, and how you got to be that good.
2. What do you like about school?
3. How much time do you spend each day studying at home? How much time each day could you spend, and when?
4. Can you see yourself in college or university? Have you even visited one? What will you be taking and toward what career will your studies lead? What will you need to do between now and graduation to get into college and to be successful there?
5. The last letter in AVID stands for determination. What does determination mean to you? Can you tell us about a time when you hung in there and didn't give up?
6. What do you believe are the benefits of working and learning in a group with others? Can you give us an example of when you accomplished something when you worked with another person or group?
7. How will you benefit from being an AVID student? What do you believe you will have to give up to be an AVID student?
8. On a scale of 1 to 10, how much do your parents want you to be in AVID? How much do you want to be in AVID? Explain.

Bonus question: What questions can we answer for you about the AVID program or the research project?

- predisposition to learn with others;
- ability to communicate thoughts and feelings; and
- support from family.

Two or three members of the selection committee would undertake the interviews in a private office during school hours. Typically, one member of the committee would ask the set of questions of each student while another member would record each student's responses. As soon as the student had left the room, the team was expected to review the responses to each question. Interviewers would share observations and perceptions about each response, then discuss and agree on a score out of five for each. Where the student responses indicated this student would be a good AVID candidate, a high score, such as 4 or 5, would be assigned.[45]

Selection committee members valued the opportunity afforded by interviews to learn more about the candidates. An AVID teacher stated: "The interviewing went very well. We found it very surprising when you sit down with these students, who are in Grade 8, how many of them had a clear vision of what they wanted to do and where they wanted to go in life."

An AVID coordinator and AVID teacher from different sites expressed their doubt about the sincerity of some students' responses:

> *Most of the students at the time talked the talk and in hindsight looking now, you know, we wonder. Because they don't seem to have the individual determination.*

> *It was really good having the person who was going to be the AVID teacher this year, myself, being the consistent person in the interviews because it did give me a chance to meet the kids.... The strongest thing that... I got out of the interviews was how much these kids really did seem to want to do well in school. What I have seen this year, of course, is that isn't necessarily transferring into being willing to do the work.*

Another coordinator spoke for many in describing the intensive work involved: "They were great. They were draining. You don't realize how much work you have actually done until the end of the day, [when] you are just wiped."

The interview provided one of the few opportunities for selection committee members to discriminate between each student's individual determination and their parents' motivation for their child to be in the program. Selection committee members found this distinction useful (and in some cases critical), since students had to volunteer to participate in AVID. One AVID teacher stated, "A key thing definitely is that the student wants it for themselves. They don't just want it because their mum or dad wants it."

Typically, the selection committee would assign an additional person—a paraprofessional or member of the school's administrative staff—to organize the flow of students to and from interviews and to administer the informed consent. While AVID staff members might need to schedule about 45 minutes per interview to include the informed consent, the involvement of the paraprofessional could help bring the frequency of the interviews down to every 30 minutes.[46] If interviews could occur more frequently, the number of applicants interviewed each day could increase, shortening the total elapsed time devoted to interviews. To permit this option, the selection committee members (already trained at project workshops in Chilliwack) would need additionally to train the paraprofessional staff member. The paraprofessional would need to be comfortable combining a role of receptionist with the intensive process of guiding each student to a full understanding of each section of the informed consent form and witnessing of the student's signature.

The Selection of AVID-Eligible Students

Following the completion of student interviews, selection committees would hold all the required information to determine the final AVID eligibility scores of the applicants who had consented to participate in the project. Under project guidelines in the Project Operations Manual, those scoring 45 or more would be deemed AVID-eligible. At case study sites, the site team had to decide which of these eligible students should be offered a place in the AVID elective immediately and which should be placed on the waiting list. Both types of schools then forwarded all eligible students' applications and scores to POLLARA.

In finalizing the list of AVID-eligible students, schools had to determine how many students scored 45 points or more (see Table 4.1). Across all sites, 91 percent of applicants (1,522 out of 1,671) were found eligible. This proportion varied across individual sites, from 77 to 98 percent during Cohort 1 recruitment and from 72 to 100 percent during Cohort 2 recruitment. The probability of acceptance into the project was perceived to be high by many sites. In interviews with selection committee members, the high probability of acceptance was probably the most commonly cited dissatisfaction with the recommended recruitment and selection process. An AVID counsellor and an AVID teacher stated:

> *The 45-point threshold was too easy to achieve.*

> *There was no student who would not have passed.... [W]e felt that the criteria [were] very wide.*

Another teacher described his perception of the effect on the composition of the AVID class: "I think we ended up with some very bright apples who didn't necessarily need AVID to achieve success. That's about 20 percent. The remaining 80 percent—I think they fit the AVID profile bang on."

45 The designated scoring choices ranged from 0 to 5 in single integer steps. Poor AVID candidates would by implication receive 0, although this was not spelled out explicitly in the manual. A bonus score could be awarded, to a maximum of 5 points, for the quality and insightfulness of questions, if any, asked by the student at the conclusion of the interview. Thus, the total score for the interview was 45, although this was capped at 40, then divided by two and rounded up to the nearest whole integer. In other words, applicants totalling 39 to 45 on the nine interview questions would all receive the maximum possible 20 points toward the scoring of AVID eligibility.

46 Teachers reported interviews taking 15 to 35 minutes.

47 For example, one coordinator was unhappy with the weight attached to the referrals—5 points per referral, to a maximum of 15.

Many felt that unsuitable students were recruited because applicants easily scored more than the eligibility threshold of 45 points or above.[47] There was a less consistent story about how this was happening. Most commonly, educators felt the threshold was simply too low. On the other hand, some—a coordinator and a teacher in the examples below—felt that they might have given inappropriately high scores to items contributing to the selection criteria:

> *We may have scored a little bit easy because the kids were just so wonderful.*

> *It's hard as a teacher, even though you try to be objective, because you care about each one of these kids and you see that there's great human potential in each one and you want to help every one of them. It doesn't necessarily mean they're a suitable candidate for this kind of program.*

Others felt that the contributions some items made to the total score were out of proportion to others, like one AVID teacher who said, "If they are 'poor attendance' but still attending more or less, they only suffer a 5-point penalty—whereas attendance is one of the keys to academic success."

Educators shared their thoughts on explanations and alternative selection approaches but there were few commonalities. Importantly, AVID teachers at different schools appeared to hold different perspectives on what identified an ideal AVID student:

> *This isn't a program to help save a kid who's struggling, necessarily. They need to have the skills. They need to have the motivation.*

> *This is long term, you know: if a student's problems are disorganization or motivation and can be solved in three months, they are not an AVID student.*

Educators felt differently about whether or not to include A-average students, and if so, which ones. One told SRDC that AVID should include naturally high achievers in Grade 8 "who are lazy….who are going to fall through the cracks in Grade 10 when the going gets tough and they actually have to do work."[48] Others felt that Grade 8 students who earned As because they worked unreasonably hard—e.g. doing five to six hours of homework a night in Grade 7—should be included, because they needed AVID "to learn better, smarter, instead of more." Another spoke of choosing students "because they have potential, but they're not achieving." Some wanted criteria to take into account performance on specific individual subjects, stating, "Math is definitely the gatekeeper….[K]ids who were struggling with Grade 9 math concepts were also carrying a lot of other baggage with them." Some educators felt that other factors in addition to those already in the criteria should have had a bearing. Of course, adding to the criteria would have added to the recruitment and selection workload.

It should also be noted that not all educators interviewed were dissatisfied with the eligibility scoring. An AVID coordinator complemented the process, and an AVID teacher from a different site focused on the outcome:

> *I think because we followed the strict guidelines for recruitment that we got really good kids—you know, true AVID-eligible kids that came through it. In speaking with other people in San Diego, or from wherever, who just take bodies to fill rooms, we really did well following the guidelines and we really appreciate that they were as well laid out as they were.*

> *This year I've got a crackerjack group. They're an amazing group of kids.*

While case study sites implemented the same 45-point threshold for determining which applicants were AVID-eligible, these sites did not have to adopt the threshold when selecting who would be in the class: they could select the class from their own selection among those scoring 45 or more. An AVID teacher at one site that chose the highest scoring students found that the eligibility score was correlated with AVID suitability: "Generally, we found that the scores reflected what we felt was potential for doing well in AVID."

Typically, AVID coordinators at sites with two cohorts reported that their Cohort 2 recruitment identified more appropriate candidates than their Cohort 1 recruitment, even though the project procedures were still followed:

> *I know our recruitment processes in terms of using the matrix, they weren't any different. Our scoring was identical. We just [had] what I considered to be a more suitable pool of kids.*

> *[Cohort 1 students], I think, didn't have a clear understanding of what AVID is. I think they thought there was some magic in it. That just because they were in a class meant they were going to get As and Bs. They didn't understand AVID was about getting them to work harder to earn those As and Bs, and when we did [Cohort 2] recruitment that message came back again and again from the AVID students themselves….Maybe that's why we didn't have huge numbers of kids interested in being in the AVID program, because it meant more work.*

48 This runs counter to the views of a senior AVID Center official, who stated, "Another huge mistake is taking kids who are really very gifted but don't want to work very hard."

We tried to be more, sort of, selective the second year, and [AVID counsellor] says that she thinks this Grade 9 class is tougher than the Grade 10 class was! So [there's] the idea of trying to figure out what exactly we are looking for. This [ideal] AVID kid that we've been told about....I'm wondering does this type of student exist in BC compared to the States?

Upon receipt of each school's package of applications from AVID-eligible students, POLLARA captured data from the application forms and student questionnaires and phoned the applicants' parents for a baseline survey focused on household characteristics and parental perspectives on the applicants' schooling. Once all surveys were completed for a particular school site, a data file containing the student contact information and other information necessary for random assignment was forwarded to SRDC. SRDC was to carry out random assignment (for students at random assignment sites).

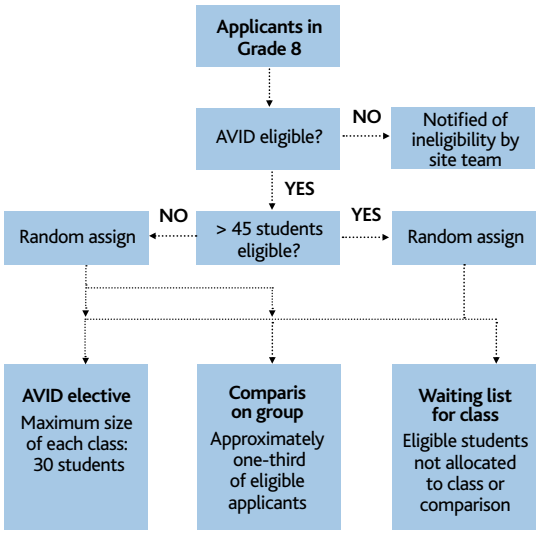
The applications of those found ineligible (about 9 percent of applicants) and who did not become research participants did not go to POLLARA. Site teams were advised that these students would respond better to a face-to-face explanation from a member of the AVID team on the strengths and weaknesses in their application and the reasons why they had not met the project criteria.

Random Assignment

Eligible students at random assignment sites were randomly assigned into one of three groups—program, comparison and waiting list—during the spring of 2005 (Cohort 1) and 2006 (Cohort 2). SRDC undertook assignment simultaneously on each site's batch of eligible student applications as soon as POLLARA had completed the parent baseline interviews for that site.

To accommodate operational needs at the school level, the actual random assignment ratio varied by site according to the number of eligible participants at the site. If there were fewer than 45 applicants at a site, approximately two-thirds of students were allocated to the program group (i.e. those offered a place in the AVID class) and the remaining third to the comparison group. No students would be added to the waiting list group. If there were 45 or more eligible applicants, a maximum of 30 students would be allocated to the program group (see Figure 4.4). The number of students allocated to the comparison group would be 15+(N-45)/3, while 2(N-45)/3 would be allocated to the waiting list. With recruitment in excess of 90 students at one site during Cohort 1, the program group was expanded to 60 to populate two AVID classes, with 30+(N-90)/3 in the comparison group and 2(N-90)/3 in the waiting list group. Random assignment was stratified with respect to three characteristics to ensure equivalent representation within each of the three experimental groups at the school level. The three characteristics were the distribution of AVID eligibility scores, gender and Aboriginal status.

Figure 4.4: Random Assignment Process



During the course of the project, whenever school site teams determined that they had a vacancy in the AVID class, they were to use the waiting list to identify students who could take up the vacancy. Students on the waiting list at random assignment sites had their position on the waiting list randomly assigned. In the event that the site team identified a vacancy in their AVID class, the student who was first on the waiting list would be the first student that the AVID team considered offering a place to. In practice, several students dropped out over the summer following recruitment and before Grade 9 AVID classes started in September. As a result, several students who placed high in their respective waiting list groups started the AVID program at the same time as those remaining in the class from the program group.

Notification to Participants

At random assignment sites, SRDC sent letters to notify students whether they were in the program group (and thus being offered a place in the class), waiting list group or comparison group. The letter reminded students of SRDC's toll-free number that parents and students could use to call SRDC if they had any questions or concerns about the assignments. Just before sending these notifications to students, SRDC ensured that the AVID coordinator at the school was aware of the assignments.

Generally, selection committee members reported that the notification process ran more smoothly than expected. Some students allocated to the comparison group (and their parents) were disappointed with the news that they did not have a place in the class but had been adequately prepared for this eventuality. As an AVID coordinator stated, "Parents knew that you took that chance. I think most of the comments and the issues that we had were before we went through the process."

Although educators had accepted the automation of the final selection as a part of the project as a price to be paid for the school's participation, a lottery was not how they saw limited spaces normally being assigned at their schools. A minority, including the AVID counsellor below, found this frustrating. The AVID administrator cited below was unaware of the one project withdrawal following random assignment to the comparison group:

> *It is difficult in my role as school counsellor to tell kids that even though you are excited about the program and you think it would be good for you, we can't give it to you.*

> *We were very up-front and clear about…the fact that you may not be part of the project itself—[instead,] you may be part of the control group. We didn't have any parents that were upset or felt it was unfair. We had people who expressed disappointment when we contacted them, but from what I understand, nobody withdrew from the project itself that did not want to be part of the control group.*

At cases study sites, student allocations to class and waiting list were known by members of the school selection committee because they had actually made the allocation decisions themselves before application packages were sent to POLLARA. Nonetheless, because enrolment of each applicant in the project was conditional on the completion of a parent baseline interview, it was still SRDC's role to send official notification to students that they were part of the project. SRDC's letter also informed students to which group they had been assigned by their school. In practice, at case study sites, SRDC's letter was not the first news students had about their assignments because site team members had revealed to applicants the likely outcome of the application, provided the parent interview was completed.

Perhaps surprisingly, the notification process was a challenge for one of the case study sites that had made their own selection of students for the class. The district director stated:

> *I had to phone [students on the waiting list] and say that they weren't in the class, and that didn't go well. The parents were just so upset….So we had a number of irate parents that would phone other parents in the community and want to know if their child got in. And if their child got in, they would say, "My child needs it more than yours. I want your kid to withdraw."*

AVID teachers would often hold a meeting or celebratory event, such as a summer barbecue, for the AVID program group members following notification. These meetings—typically in May or June—provided a forum for students to meet their new AVID peers and to prepare for the four-year program ahead. The formal delivery of the AVID program would not commence until after the summer vacation, when the students started Grade 9. For Cohort 1 this was in September 2005, and for Cohort 2 it was in September 2006. The program delivery for Grade 9 is described in Chapter 6. Students' attendance and use of the waiting list is reviewed in Chapter 7.

The selection process illustrated in Figure 4.3 would take more than three months to complete for most sites. The typical elapsed time from holding the first evening information sessions to notifications being mailed to students was 10 weeks. Activities at the school—organizing and processing applications, interviews and selection—would occupy the first five of those weeks. The target duration of the period from when packages of eligible applications reached POLLARA to the time SRDC would send out notification letters was also five weeks.

Success of Recruitment

Numerically, the BC AVID Pilot Project recruitment exercise was a success. Over the two years of recruitment, 1,671 students applied to join the project. Of these, 1,522 were found eligible and became project participants. Table 4.2 shows that close to one-quarter of all incoming Grade 9 students in 2005 was found eligible for AVID and became project participants. Of the 1,522 project participants, a large proportion (n=901, 59 percent) were immediately offered a place in the AVID elective. Another 166 (11 percent) were on the waiting list and might receive an offer of a place later.

There were some considerable variations in recruitment totals by site. Case study sites were clearly smaller and secured fewer recommendations and applications, as might be expected. Many other school-to-school differences are masked in the totals and averages in Table 4.2. Across cohorts, the number of students applying varied from a low of 27 at one random assignment site in Cohort 2 to a high of 115 at a different site in Cohort 1. Given the labour- intensive nature of recruitment and selection, the latter school had considerably more work to process its applications. The school with 27 applicants faced a challenge to keep the class at a viable size, especially since not all students were found eligible. Student recommendations typically outnumbered student applications, but there were three sites during Cohort 1 recruitment and one site during Cohort 2 recruitment where applications outnumbered recommendations. This situation was possible because students could self-refer and did not require a recommendation to apply.

There were differences across cohorts. Fewer students were recruited for Cohort 2. At the 13 sites with two cohorts of project participants, the average number of program group members per class in Cohort 1 was 29.7. For Cohort 2 it was 26.5: 90 percent of the equivalent figure a year earlier. In addition, the Cohort 2 waiting list was just a fraction of the size for Cohort 1 and was created for just three of the 13 sites (compared to 13 of 14 sites in Cohort 1).

Educators told SRDC researchers that Cohort 2 recruitment differed from Cohort 1 recruitment, primarily because they had learned from experience. When one teacher who had been involved with the two cohorts was asked whether Cohort 2 recruitment was different, she stated:

Table 4.2: Number of Students at Each Recruitment Step

	RA sites		CS sites		All sites	
	Mean per site	Total	Mean per site	Total	Mean per site	Total
Size of Grade 9 at participating sites (2005)	230.8	3,231	140.5	562	210.7	3,793
Number of sites (2005)		14		4		18
Number of student recommendations	96.6	1,352	59.7†	179†	90.1†	1,531†
Number of student applications	63.1	883	48.3	193	59.8	1,076
Number of eligible applications (project participants)	57.2	801	43.5	174	54.2	975
Number of sites (2006)		13				13
Number of student recommendations	75.5	981			75.5	981
Number of student applications	45.8	595			45.8	595
Number of eligible applications (project participants)	42.1	547			42.1	547
2005						
Program group	31.8*	445	27.8	111	30.9	556
Waiting list group	6.1	86	15.8	63	8.3	149
Comparison group	19.3	270	not applicable for case study sites	270		
2006						
Program group	26.5	345			26.5	345
Waiting list group	1.3	17			1.3	17
Comparison group	14.2	185			14.2	185
Both cohorts						
Program group	29.3	790	27.8	111	29.1	901
Waiting list group	3.8	103	15.8	63	5.4	166
Comparison group	16.9	455	not applicable for case study sites	455		
Total number of project participants		**1,348**		**174**		**1,522**

Source: Head counts obtained from BC Ministry of Education Reports on student statistics by school from 2002–03 to 2006–07, published December 2006.
Notes: "Recommendations" and "Applications" are calculated from estimates provided during recruitment phases by members of the core site team at pilot sites.
"Eligible applications" are applications determined eligible by school sites and verified by POLLARA, where the eligibility requirement of a parent interview was also completed.
* Includes one site with 60 program group members in two classes. Average program group size per class was 29.7.
† The total number of recommendations in 2005 is not known for one case study site. The figure is treated as missing in these calculations.

> *I think it was. It was equally rigorous in that it had to meet the criteria….I think I could say in general all of us were less anxious because we'd done it once. We had a better understanding of what was expected and what it would look like to accomplish the given tasks. The first year was really arduous. I just can't tell you how much work it was…. The second year is "Okay, we can do this. Oh my goodness, it's a lot of work, but, yeah, we can do this. We know what it's supposed to look like." So that was a difference.*

In an interview, an AVID administrator stated: "We followed pretty much what had been prescribed for us. Well, I'd say we followed it exactly….I think both years went well. In the end, we had fewer students on our list, or at least willing to go forward, but still enough to run the cohort."

Variations in recruitment numbers were not automatically reflected in eventual class sizes because of attrition and differential use of waiting lists. For example, one school preferred a large Cohort 1 class size (above 30) and chose to identify three vacancies in the class from the outset, bringing in three students from the waiting list for an inaugural class size of 33. More details on class sizes are provided in Chapter 7.

WHO THE BC AVID PILOT PROJECT RECRUITED

Clearly, despite efforts to standardize the process of recruitment and selection across sites and cohorts, there were variations in the process reported by site team members and variations in terms of numbers recruited. Table 4.2 shows that there were differences between random assignment sites and case study sites and across cohorts in terms of the numbers recruited and found eligible. These differences do not mean that standardization necessarily failed, because such differences could arise anyway from differences in the student populations attending different schools or attending the same school in different years. Educators have also explained how the approach to recruitment and selection varied across cohorts as both they and students at the school learned from the experiences of Cohort 1. These differences could be important if the result was a systematic move toward or away from selecting AVID-suitable students. Educators had mixed views on whether Cohort 1 or 2 represented a better selection, but the majority felt more confidence in the selection of Cohort 2. An AVID coordinator and AVID teacher from different sites exemplified this view:

> *[T]he kids in the second cohort had a better understanding of their role in being a change agent. They have to decide that they want it to be different, not that somebody else wants it to be different for them. And I think that has been a significant factor in why in some ways this cohort is a little bit smoother running.*

> *As opposed to 10 or 12 students who were not really AVID-type students last year, this year we've only got two or three.*

Nonetheless, some felt the first year had been more successful. These perspectives came from an administrator and counsellor in a joint interview and an AVID teacher at a different site:

> *The level of enthusiasm, correlated with even the level of interest, was probably greater in the first year than in the second year.*

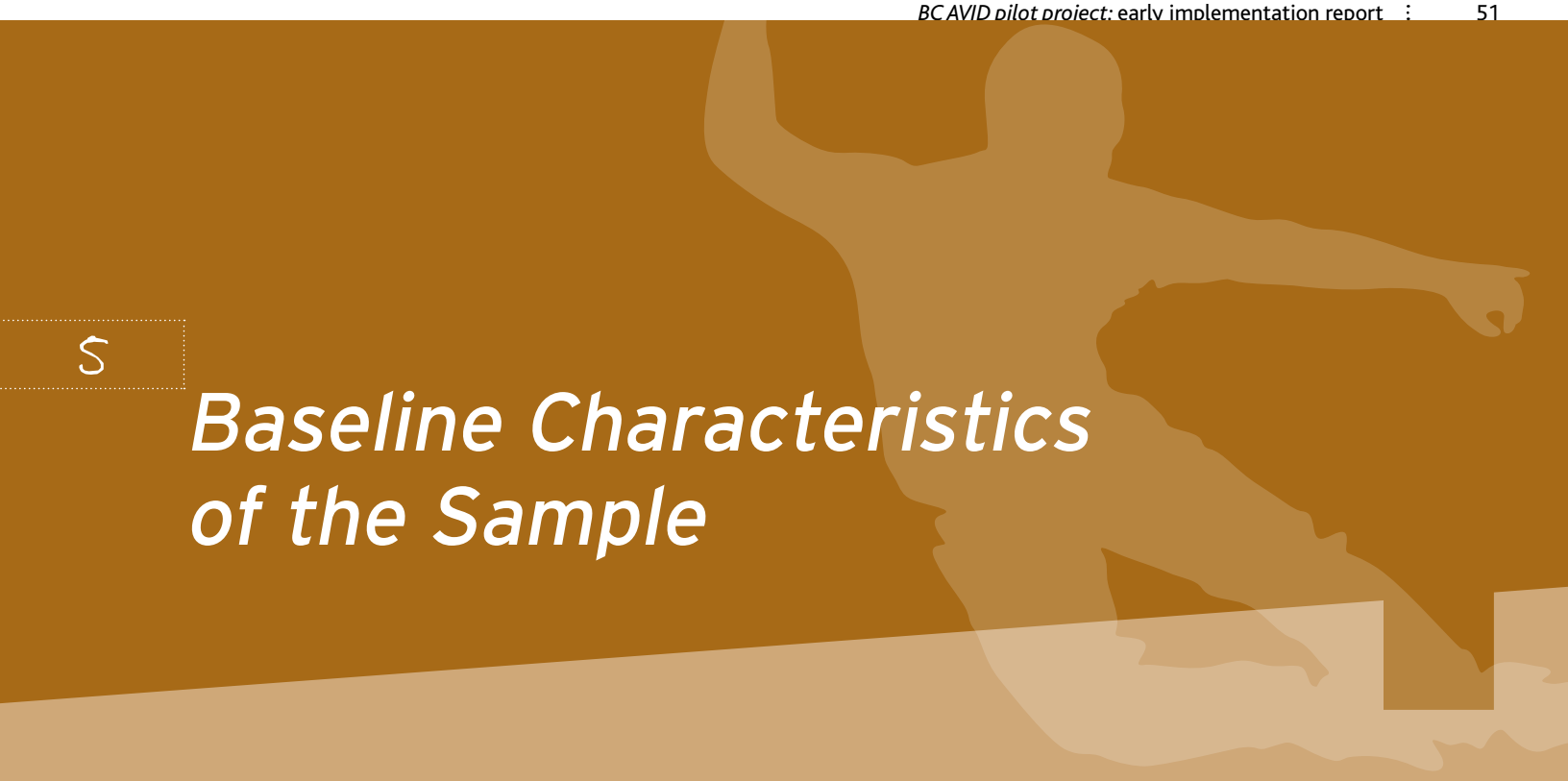
> *Interviewer: Do the AVID students that you received fit the profile of the types of students that you were expecting?*

> *AVID Teacher: First year, yes. Second year, no.*

An empirical assessment of whether Cohort 1 was more or less AVID-suitable than Cohort 2 can only be sought at the stage of observing outcomes, when impacts of AVID on the different cohorts are calculated.[49] Nonetheless, it will be interesting to see, in Chapter 5, how many of these differences were manifested by changes in the characteristics of the types of students recruited in Cohort 1 compared to Cohort 2 or between random assignment sites and case study sites.

Whatever differences were applied in recruitment and selection, they will affect program and comparison groups in equal measure. This is because random assignment took place after selection had been completed. Whatever the characteristics of the students recruited, these should be apportioned equally by the random assignment process to the different experimental groups. In this way, the experimental derivation of the impacts of AVID should not be biased by differences in recruitment practice between sites and years. Herein lies one strength of the evaluation approach adopted by this study compared to the approach of earlier evaluations, which could not control for the intricacies of the selection process.

49 If the program appears to have a differential impact on one cohort over the other, differential selection will only be one of many possible explanations. It could be that the delivery of the program varied across cohorts or even that the educationalenvironment changed—e.g. due to changes in admission policies at post-secondary institutions—to make one cohort of students that was otherwise equivalent in selection and program experience to another cohort better able to take advantage of the program's benefits.



5

Baseline Characteristics of the Sample

Introduction

This chapter presents data on individual student characteristics collected during recruitment and selection, including SRDC's baseline survey. The first section uses the data to determine the extent to which the BC AVID Pilot Project has recruited its population of interest—i.e. students that correspond to the project's profile of an AVID-suitable student, as presented in Chapter 4. This section also presents complementary characteristics that might influence students' chances of graduating high school or accessing post-secondary education. The second section of the chapter provides an analysis of differences in characteristics across the cohorts of participants. As mentioned in Chapter 4, the approach adopted to recruiting and selecting the two cohorts could have differed and, if so, the students selected for each cohort could be expected to differ. The third section relays the success of the random assignment process in creating experimental groups for later impact analysis. This analysis is important because the creation of comparable groups was one of the principal rationales for using a random assignment evaluation design for the BC AVID Pilot Project.

CHAPTER SUMMARY

- **The BC AVID Pilot Project recruited students whose characteristics are broadly in line with the AVID student profile.** The academic profile of recruited students reflected the target of middle-achieving students motivated to attend post-secondary education with relatively few behavioural or attendance problems. The students' socio-economic profile mirrored more closely that of BC students as a whole than the AVID profile. Students from minorities under-represented in college and economically disadvantaged groups, such as single-parent families, were not over-represented in the project sample.

- **Recruited students matched the AVID student profile more closely at random assignment sites than at case study sites.** Case study sites had a higher proportion of students with an average above B in Grade 8 and who had been reported to parents for behavioural problems at school. On the other hand, students at case study sites were more likely than those from random assignment sites to have parents who had not participated in post-secondary education.

- **Among sites that recruited two cohorts, there were few significant differences between the students recruited.** Among characteristics related to the AVID student profile, only two differences emerged across cohorts: higher academic achievement in Grade 8 and less use of additional support for learning for Cohort 2 students

- **There were few apparent differences in observed characteristics at baseline between program and comparison group students from random assignment sites.** While the computer-generated assignment ensured that there were no systematic differences between the two experimental groups, very little sampling variation is apparent.

ROLE OF BASELINE DATA

The main sources of information for the present chapter are the baseline surveys of the 1,522 project participants and their parents. Students completed a paper questionnaire and parents responded to a telephone survey. These data were collected during the recruitment and selection process, before random assignment but were not used in making the selection. They therefore provide an independent means to assess the success of recruitment and selection in terms of the characteristics of the resulting project participants. The characteristics of different groups of students can also be compared to determine cohort differences and the success of the random assignment. Where information is not available from surveys and not yet available from administrative data sources, the chapter uses data collected during the recruitment process from application forms and teacher-completed criteria scoring summary sheets.

The rich information about participants contained in the baseline surveys will also have other uses in the project. It will allow researchers later to identify subgroups for which separate impact analyses can be conducted, such as higher- and lower-income groups. It will also assist in any statistical adjustments necessary to improve precision in final impact estimates.

CHARACTERISTICS OF THE PARTICIPANTS

The BC AVID Pilot Project recruited 1,522 participants in total. Of these, 1,348 were recruited at random assignment sites in the two cohorts—Cohort 1 in early 2005 and Cohort 2 in early 2006. The remaining 174 were recruited at case study sites in a single cohort in early 2005. As presented in Chapter 4, the recruitment of the participants followed a standardized scoring system. This scoring system was intended to identify AVID-eligible students who matched the AVID student profile. Those characteristics are presented in Text Box 5.1.

In the following section, the profile of project participant characteristics (program, comparison and waiting list groups combined) at baseline is presented under headings relating to each of the AVID-suitable characteristics (see Text Box 5.1). Characteristics are presented separately for participants at random assignment sites and case study sites. Future impact

Text Box 5.1: General Characteristics of an AVID-Suitable Student

Has academic potential:
- can succeed in rigorous courses with support;
- does not receive additional academic support;
- C to B Average;
- average to high standardized test scores;
- appropriate classroom behaviour;
- good attendance;
- satisfactory work habits;
- desire and determination to be successful at school; and
- college or university aspirations.

May have one or more of the following circumstances:
- single-parent/large families;
- first in family to attend college;
- low income;
- member of underrepresented minority at college; and
- other special circumstance

Source: Project Operation Manual: General Characteristics of an AVID-Suitable Student.

Table 5.1: Distribution of Participants by Age Group and Gender

	RA sites	CS sites
Age		
13	67.3	66.1
14	32.7	33.9
Gender		
Female	52.9	55.7
Male	47.1	44.3
Sample size	**1,348**	**174**

Source: BC AVID Pilot Project student self-completed questionnaire.

analysis of the BC AVID Pilot Project will only be conducted with students from random assignment sites, so it is important to present their baseline characteristics separately. Case study sites were selected to represent smaller and more rural schools, and it is valuable to assess what differences in student characteristics arose when they applied the recruitment and selection approach used at random assignment sites to their students.

This section indicates demographic, academic and socio-economic characteristics of the participants. The section ends with an assessment of how well the BC AVID Pilot Project recruited its target population.

AVID Participants: Demographic Characteristics

The BC AVID Pilot Project did not have specific targets in terms of age or gender. Therefore, it would be expected that for these characteristics, the sample would resemble the Grade 8 population from which it was drawn.

Nearly all participants were aged either 13 or 14. As shown in Table 5.1, approximately one-third of the sample was aged 14 or older at the end of the recruitment process, while the remaining two-thirds were aged 13 or younger. For confidentiality reasons, proportions with different ages are not presented in this table.

Table 5.1 also presents the gender distribution of the sample. Although AVID is not specifically targeted for a particular gender, other jurisdictions have tended to make AVID available to higher proportions of females than males.
For example, in 2005–06 in California, home to more AVID schools than any other state, 60 percent of AVID students were female. In the same year, 70 percent of AVID students in Chilliwack School District were female.

In the BC AVID Pilot Project sample, the gender distribution is quite representative of the general population. The random assignment sites recruited 53 percent females and 47 percent males. The case study sites recruited fewer males—56 percent females and 44 percent males. Having this relatively high proportion of males in the BC AVID Pilot Project sample will allow later tests of whether males or females benefit more from the offer of the program.

AVID-Suitable Students: Academic Characteristics

As presented in Text Box 5.1, BC AVID Pilot Project participants could possess nine academic characteristics. This section presents data relating to eight of them.[50]

Does Not Receive Additional Academic Support

The general characteristics of an AVID-suitable student in Text Box 5.1 state that participants should not receive additional academic support. The parent telephone survey asked parents, "Since he/she started school, has your child obtained special help or taken special courses because of learning difficulties?" If the parent responded that his or her child had obtained such help or had taken special courses, he or she was asked whether, since the beginning of Grade 8, the child had obtained special help or taken special courses because of learning difficulties.

The majority of parents reported that their children had never received additional support since they started school (82 percent and 76 percent). About 15 percent of the parents at random assignment sites mentioned that their child received support in the past but not in the current year. Just under 9 percent at random assignment sites had received such support in the current year, compared to 3 percent at case study sites.

C to B Average and Standardized Test Scores

The AVID program has been developed for middle-achieving students. This implies students with a B to C average for all courses.

During the recruitment process, each school's selection committee was asked to use the most recent report card grades to determine each student's average for selection purposes. In most schools, grades for all subjects were included in calculating the term average. If, however, a school customarily excluded some subject grades in calculating the term average, that average was also acceptable to use. The figures presented in Table 5.3 are based on data used in the selection process.

50 Data relating to one of these characteristics are not available for presentation numerically in the present chapter. The characteristic "Can succeed in rigorous class with support" could have been captured in the recruitment process, teacher referrals or student interviews but is not readily amenable to analysis here.

Table 5.2: Participants' Receipt of Additional Academic Support (Percentage)

	RA sites	CS sites
Never received support	76.0	81.9
Has received support, but not since beginning of school year	15.4	15.2
Has received support since beginning of school year	8.7	2.9
Sample size	**1,340**	**171**

Source: BC AVID Pilot Project parental questionnaire.
Note: Rounding could cause slight discrepancies in the calculation of sums.

Table 5.3: Distribution of Participants by Average (Percentage)

	RA sites	CS sites
A	12.5	23.0
B–C	83.1	72.4
Below C	4.4	4.6
Sample size	**1,347**	**174**

Source: BC AVID criteria scoring summary.

Table 5.4: Frequency with Which Parents Have Been Contacted by School Because of Participants' Behavioural Problems (Percentage)

	RA sites	CS sites
Never	85.0	75.9
1	8.5	13.8
2	3.7	6.9
3 or more	2.8	3.4
Sample size	**1,344**	**174**

Source: BC AVID Pilot Project baseline survey.

At the random assignment sites, roughly 8 out of 10 participants were in the B to C average range. Less than 13 percent of the participants at random assignment sites were above a B average, and 4 percent were below a C average. Interestingly, the case study sites recruited almost twice as high a proportion of participants with a letter average grade above B.

During the recruitment, the selection committee also looked at the standardized test scores the school customarily collected. The role of these data was to determine whether middle-achieving students were meeting or exceeding the grade expectations on those standardized test scores. Nearly half of the students with an average equal to or below B had met or exceeded the grade expectations on standardized tests.

Appropriate Classroom Behaviour
Another important characteristic of an AVID suitable student is appropriate classroom behaviour. Parents were asked whether, during the past 12 months, a teacher or other school official ha d contacted them because of a problem with their child's behaviour. As seen in Table 5.4, 85 percent of parents at the random assignment sites had never been contacted by the school for these reasons in the 12 months before the survey. Around 8 percent had been called once, 4 percent had been called twice and 3 percent had been called three times or more.

In comparison, a greater proportion of the case study site students had been called at least once in the 12 months before the survey.

Regular Attendance
Regular attendance was another important criterion contributing to students' eligibility for AVID.[51] In the survey, the students were asked, "Since the beginning of this school year, about how many days were you absent from school for any reason?"

51 BC AVID criteria scoring summary

Table 5.5: Participants' Absence from School (Percentage)

	RA sites	CS sites
None	12.4	13.5
1–3 days	38.9	34.5
4–6 days	23.9	24.6
7–10 days	14.9	14.0
11 days or more	9.9	13.5
Sample size	**1,336**	**174**

Source: BC AVID self-completed questionnaire.

Table 5.6: Satisfactory Work Habits: Proportion of Participants Reporting That the Following Statement Is True "Often" or "All the Time" (Percentage)

	RA sites	CS sites
When a teacher gives me homework, I do it.	81.0	68.8
When school work is very difficult, I stop trying.	8.4	8.6
I do as little work as possible; I just want to get by.	7.7	12.1
I complete my homework on time.	73.5	59.8
I take notes in class.	43.5	48.8
I study notes that I take in class.	43.2	43.1
Sample size	**1,344**	**174**

Source: BC AVID Pilot Project student self-completed questionnaire.
Note: Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

Table 5.5 shows that around one student in every eight recruited for the project (12 percent and 14 percent) reported not missing any days of school since the beginning of Grade 8. The majority of students reported missing either one to three days or four to six days. Around 15 percent of the participants reported missing 7 to 10 days. Approximately 10 to 13 percent of those recruited reported missing 11 school days or more.

Satisfactory Work Habits

Some measures of the work habits of the BC AVID Pilot Project participants, as recorded in the baseline survey, are shown in Table 5.6.

From those measures, it is interesting to observe that almost half of the participants mentioned taking notes in class often or all the time. The same proportion mentioned that they studied the notes that they took in class. At the random assignment sites, eight participants in every ten mentioned that they do their homework as provided by the teacher often or all the time. Seven out of ten often or always complete their homework on time. Those proportions are higher in random assignment sites than case study sites.

Around 8 percent of the participants at both type of sites mentioned they often or all the time stopped trying when they found schoolwork very difficult. About 8 percent of the participants at random assignment sites and 12 percent of those at case study sites mentioned that they did as little work as possible often or all the time.

Desire and Determination to Be Successful at School

A student's desire and determination to be successful at school is difficult to measure. The selection committee assessed this attribute of students from interviews and written application responses. The baseline survey asked participants many questions concerned with their engagement in high school (reported later in this chapter). It also asked them if they expected to stay in school until they graduated from high school. Nearly all participants (96 percent) answered that they expected to graduate from high school.

Post-Secondary Aspirations

As the objective of the BC AVID program is to prepare middle-achieving students to access post-secondary education, their motivation to achieve such goals is an important component of student suitability for the program. In the baseline survey, the students were asked, "What is the highest level of education you would like to get?"

Table 5.7: Participants' Educational Aspirations (Percentage)

	RA sites	CS sites
High school diploma or less	2.0	2.9
Trade/vocational certificate or apprenticeship	4.9	4.6
College certificate or diploma	18.3	17.3
University degree	59.3	58.4
Unknown	15.6	16.8
Sample size	**1,348**	**174**

Source: BC AVID Pilot Project student self-completed questionnaire.
Note: Rounding could cause slight discrepancies in the calculation of sums.

Table 5.8: Participants by Type of Family and Household Size (Percentage)

	RA sites	CS sites
Family structure		
Single-parent	19.7	16.7
Two-parent[a]	80.3	83.3
Household size		
2–5 members	89.4	85.6
6 members or more	10.6	14.4
Sample size	**1,348**	**174**

Source: BC AVID Pilot Project parental questionnaire.
Note: [a] Two-parent family, which can include a parent or guardian and his or her partner, where the partner is not the parent of the child. Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

As shown in Table 5.7, the educational aspirations of the participants were similar between the two types of sites. The majority of participants reported an aspiration to obtain a post-secondary qualification. Six out of ten participants aspired to complete a university degree. Approximately two out of ten wanted to complete a college certificate or diploma. Around 15 percent did not yet know the type of education degree they would like to get. Fewer than 5 percent wanted a trade or vocational degree or an apprenticeship. About 2 to 3 percent, depending on the type of site, wanted to complete a high school diploma or less.

AVID-Suitable Students: Socio-economic Circumstances

Traditionally, AVID recruits students from disadvantaged socio-economic circumstances. In this section, four such sets of circumstances will be discussed.

Single-Parent/Large Families

The BC AVID Pilot Project's selection criteria prioritized students from single-parent families or from large families.

Around 20 percent of parents reported that they did not have a spouse or a partner currently living with them. This implies that two out of ten participants came from single-parent families (see Table 5.8). Unfortunately, it is not possible to determine whether this figure is lower or higher than in the school population at selected sites. Across the entire province, however, 26 percent of BC families with children still at home are single-parent families (Statistics Canada, 2007a).

In the project's selection criteria (see Table 4.1), a large family was defined as a family with six household members or more.[52] The parents were asked, "Including yourself, how many people usually live in your household?" The case study sites had slightly more participants from large families than random assignment sites. One in seven participants from case study sites came from a large family, compared to 11 percent of participants from random assignment sites (see Table 5.8). Among all BC family households in 2006, just 4.6 percent contained six or more persons (Statistics Canada, 2007b).[53]

First in Family to Attend College

The general characteristics of an AVID-suitable student include the characteristic, "First in the family to attend college." "Ever attended college," however, is less readily determined than "completed a post-secondary qualification." Thus, the latter criterion was used in selection criteria. As mentioned earlier, the pilot project's definition of post-secondary education includes apprenticeship, private vocational institution, college and university. In practice, the BC AVID Pilot Project prioritized

52 A household includes all the persons, whether or not they are family members, who usually live in the participant's home, even if they were temporarily away on business, at school or on vacation. Renters/tenants were not included in household totals if they resided separately from the respondent's household (e.g. meaning in a dwelling space with separate entrance, kitchen and bathroom).
53 The data in this source cover family households with and without children.

Table 5.9: Parental Education among Participants from Two-Parent Families (Percentage)

	RA sites	CS sites
Neither has PSE credential	35.9	44.8
One does not have PSE credential	37.4	32.4
Both have PSE credential	26.7	22.8
Sample size	**1,082**	**145**

Source: BC AVID Pilot Project parental questionnaire.

Table 5.10: Parental Education among Participants from Single-Parent Families (Percentage)

	RA sites	CS sites
High school diploma or less	52.6	75.9
More than high school diploma	47.4	24.1
Sample size	**266**	**29**

Source: BC AVID Pilot Project parental questionnaire.

the selection of students whose parents had not obtained a credential from two years or more study at a post-secondary institution.

Tables 5.9 and 5.10 show parental education status separately for participants living with two parents, which can include a parent or guardian and his or her partner, where the partner is not the parent of the child, and for those living with a single parent, respectively.

For 36 percent of participants with two-parent families at random assignment sites (see Table 5.9), neither parent held a post-secondary qualification. For 38 percent, one of the two parents does not hold a post-secondary qualification. For 27 percent, both have post-secondary degrees.

A higher proportion of the participants at case study sites, compared to random assignment sites, lived with two parents who did not a post-secondary qualification (45 percent compared to 36 percent).

As shown in Table 5.8, around 20 percent of participants reside in single-parent families. Table 5.10 indicates the proportion of these single parents or guardians that completed a post-secondary qualification. Half of the single parents at the random assignment sites did not hold a post-secondary qualification, compared to three-quarters of the single parents at the case study sites.

Low Income

Low-income status has traditionally featured in AVID recruitment (see Chapter 4) and was a feature of recruitment for students in the Future to Discover Pilot Project (SRDC, 2007). In the BC AVID Pilot Project, however, it was not possible for school-based selection committees to directly identify students coming from low-income families. Data on family income were collected for analytical purposes only, following recruitment, in the parental baseline survey.

The parent who responded to the survey was asked about the amount of income he or she, and, if applicable, his or her spouse or partner had received from seven different sources of income during the year before the survey—i.e. 2004 for Cohort 1 and 2005 for Cohort 2.[54] Income was reported for 88 percent of participants at random assignment sites and 91 percent at case study sites.

The income distribution is shown in Table 5.11. No cut-off has been formally established to determine which participants are lower-income versus higher-income. For comparison, however, the income distribution in 2005 for families that have children under the age of 18, from the 2006 Census, is also shown. It should be noted that these sources are not directly comparable. BC AVID Pilot Project participants, aged 13 to 14, are selected from a specific set of schools' catchment areas, while the Census figure applies for all BC families with children under the age of 18. The comparison nonetheless suggests that the BC AVID Pilot Project sample is drawn from a "close to typical" income distribution for the province, rather than from lower-income families exclusively.

Members of Under-Represented Minorities in Post-Secondary Education

In the BC AVID Pilot Project, there was a specific prioritization in recruitment for two under-represented minorities: Aboriginal students and English as a Second Language (ESL) students.

In order to determine the number of Aboriginal students participating in the pilot project, parents were asked about their child's ancestry or ethnic group. The proportions reporting Aboriginal ancestry are presented and discussed in this report. Other indicators, from administrative data, will be available for later reports. Table 5.12 indicates that the proportion of Aboriginal participants at case study sites was twice as high as it was at random assignment sites: 19 percent compared to 9 percent. For comparison, BC Ministry of

54 Those different sources of income were: wages and salaries before deductions, including bonuses, tips and commissions; net income from farm and non-farm self-employment, after expenses and before taxes; Employment Insurance, before deductions; Social Assistance and other income supplements from provincial or municipal sources; support payments, such as spousal and child support; other government sources, such as Canada or Quebec Pension Plan benefits, Old Age Security Pension or Workers' Compensation Benefits; other non-government sources, including dividends, interest and other investment income, employer pensions, Registered Retirement Income Fund (RRIF) and annuities, scholarships and rental income.

Table 5.11: Distribution of Total Income of Families with Children under the age of 18 (Percentage)

	RA sites	CS sites	2006 Census
Less than $20,000	7.7	8.6	10.7
$20,000–$30,000	7.2	4.0	7.8
$30,000–$40,000	7.4	7.5	9.4
$40,000–$50,000	7.4	7.5	9.4
$50,000–$60,000	8.2	8.0	8.6
$60,000–$70,000	8.6	8.6	8.4
$70,000–$80,000	7.6	10.9	8.1
$80,000 or more	34.3	35.6	37.5
Not provided	11.6	9.2	n.a.
Sample size	**1,348**	**174**	n.a.

Source: BC AVID Pilot Project parental questionnaire.
Note: Rounding could cause slight discrepancies in the calculation of sums.

Table 5.12: Under-Represented Minorities: Proportion of Participants (Percentage)

	RA sites	CS sites
Aboriginal	9.3	18.8
First language not English	11.3	3.4
Sample size	**1,348**	**174**

Source: BC AVID Pilot Project parental questionnaire.
Note: Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

Education data record that in 2005–06, 31.1 percent of the incoming Grade 9 students at case study sites and 11.2 percent at random assignment sites were Aboriginal students.

Although it appears at first glance that the project under-recruited Aboriginal students relative to their presence in the school population, it should be borne in mind that these data sources can record Aboriginal status differently.

ESL[55] status is another indicator that will be available from administrative data for analysis in later reports. As a proxy indicator of the ESL category, the answer to a different survey question can be considered. The parent was asked, "What was the language that your child first learned at home and still understands?"

More than 11 percent of the parents of participants at random assignment sites mentioned that the first language their child learned at home and still understood was a language other than English. Ministry-reported ESL proportions were 4 percent for all incoming Grade 9 students at random assignment sites and 3 percent at case study sites, but the figures cannot be directly compared due to data differences.[56]

Conclusions on the Success of Recruitment

The project has recruited a cross-section of students who appear broadly to match the AVID student profile academically in that they were middle-achieving students. More than half those with an average of B or below met or exceeded grade expectations on standardized tests. Virtually all expected to graduate and large majorities reported good study habits, other than note taking, and aspired to obtain a post-secondary qualification. Small minorities were reported to be in receipt of learning assistance, had been absent 11 or more days during Grade 8 or had been reported to parents as behaviourally disruptive. Socio-economically, the match with the AVID student profile was not as good, with no obvious over-representation of students recruited from low-income or educationally disadvantaged backgrounds.

COMPLEMENTARY CHARACTERISTICS

This section reviews some of other characteristics captured in baseline surveys that could influence students' achievement in high school and their access to post-secondary education. Information will be presented on parents' educational aspirations, barriers to post-secondary education and parent financial support, as well as peer group and high school engagement.

55 ESL students are those whose primary language(s), or language(s) of the home, is (are) not English and who could therefore require additional services in order to develop their individual potential within BC's school system. (Source: BC Ministry of Educations's English as a Second Language Policy Framework 1999, retrieved June 11, 2008, from www.bced.gov.bc.ca/esl/policy/toc_frame.htm.)
56 BC Ministry of Education K–12 School Reports, retrieved January 15, 2008, from www.bced.gov.bc.ca/reporting/levels/s-bas.php.

Table 5.13: Distribution of Participants per Parental Aspirations for Their Education (Percentage)

	RA sites	CS sites
Less than high school diploma	+++	+++
High school diploma or equivalent	+++	+++
Trade/vocational certificate or diploma or apprenticeship	3.9	7.6
College certificate or diploma	10.4	8.1
University degree and beyond	60.6	60.4
Any level of education after high school (no preference)	24.8	21.5
Sample size	**1,339**	**172**

Source: BC AVID Pilot Project parental questionnaire.
Note: +++ Results are based on sample sizes that are too small for publication (less than five persons) or that could reveal small sample sizes by subtraction.

Parent Educational Aspirations

The educational trajectory of students could be influenced by the educational aspirations their parents have for them (Hao & Bonstead-Bruns, 1998). In the parental baseline survey, parents were asked three different questions in order to assess the educational aspirations they had for their children.

The first question was: "How important is it to you that your child graduates from high school?" Virtually all the parents who answered the questionnaire said that it was very important to them that their child graduated from high school.

The second question was about post-secondary education. Parents were asked: "How important is it to you that your child gets more education after high school?" Similar proportions of parents said that it was important to them that their child got more education after high school at both random assignment sites (88 percent) and case study sites (84 percent).

The last question was: "What is the highest level of education that you hope your child will get?" As demonstrated in Table 5.13, six parents in every ten mentioned that they would like their child to achieve at least one university degree. About one-quarter of parents mentioned that they hoped that their child would achieve a post-secondary qualification without expressing a preference about which type of degree their child would get.

Approximately one parent in every ten would like their child to have a college certificate or diploma. None of the parents hoped that their child would get less than a high school diploma. Around one parent in ten (10 and 8 percent in random and case study sites, respectively) hoped that their child would get a college certificate or diploma. About 4 percent of the parents at random assignment sites, compared to eight at case study sites, hoped their child would get a trade or vocational certificate or diploma or an apprenticeship. For confidentiality reasons, the proportions of parents that would like their child to get a high school diploma or its equivalent or less than a high school diploma cannot be presented.

Barriers to Post-Secondary Education

As the students targeted by the project by definition face barriers to accessing post-secondary education and are therefore under-represented on post-secondary campuses, a small number of questions were asked in the baseline surveys to specify the barriers.

The parent was asked whether, given his or her aspirations for his or her child, there was anything standing in the child's way of achieving these aspirations. If the parent said yes, he or she was asked to list all the types of barriers his or her child could face. Interpreting these responses is difficult, because possible barriers could vary with the level of aspirations of parents. For example, it is one thing to say that there is a barrier preventing a child's completion of two or more university degrees; it is quite another to say there is a barrier to his or her attainment of a high school diploma.

Just less than three-quarters of parents mentioned that there was no barrier standing in their child's way (see Table 5.14). Around 15 percent of the parents mentioned that finances would present a barrier to their child. About 5 percent mentioned that their child's lack of interest or motivation was a barrier to the educational aspirations they had for them. About 2 percent of parents at random assignment sites mentioned that their child's learning disability (or disabilities) would be a barrier. None of the parents at case study sites mentioned that the health problems of their child would present a barrier. Around 4 percent of parents said that their child not meeting academic or course requirements would be a barrier. The same proportions of parents at both types of sites mentioned that barriers other than those named in Table 5.14 stood in their child's way. An example of a barrier that was often mentioned by parents was the organizational skills of their child.

Table 5.14: Proportion of Participants Whose Parents Report that They Face Barriers to Achieving Educational Aspirations (Percentage)

	RA sites	CS sites
No barriers	73.8	74.4
Financial situations	13.6	15.1
Not enough interest or motivation	5.5	5.8
Learning disability	1.8	+++
Health problems	+++	+++
Won't have requirements to get in (marks too low / current courses limit choices)	4.4	+++
No program available close to home	+++	+++
Other	5.5	4.7
Sample size	**1,326**	**172**

Source: BC AVID Pilot Project parental questionnaire.
Notes: +++ Results are based on sample sizes that are too small for publication (less than five persons) or that could reveal small sample sizes by subtraction. Because some participants could be in more than one category, totals are not necessarily equal to all categories summed.

Parent Financial Support

It has long been established that families are an important source of both monetary and non-monetary support for students. Parental contributions—the most common type of family contribution—are described in this section.

In order to evaluate how parents prepare themselves and their children for the financial demands of post-secondary education, the parent was asked: "Is there anything specific that is being done or has been done to ensure that your child would have money for further education after high school?" Parents were allowed to give multiple answers.

As shown in Table 5.15, at the time of asking (Grade 8), under one-third of parents did not plan to do anything specific to prepare or help their child to deal with the financial aspects of continuing their study beyond high school. More than one-quarter (28 percent) of the parents mentioned that they had started a Registered Education Saving Plan (RESP) or a savings account for the post-secondary education of their child. One-third of parents at random assignment sites mentioned that they started a saving account for their child's post-secondary education, compared to one-quarter of parents at case study sites. One-fifth (19 percent) of the parents at random assignment sites had made an investment, such as mutual funds or Canada Savings Bonds, compared to 12 percent of parents at case study sites. Around one parent in every ten encouraged their child to earn money or to get a job. Roughly 5 percent of the parents set up a trust fund for their child. Another one in ten encouraged their child to work toward a scholarship. About 3 percent of the parents at random assignment sites started to work or took an additional job in order to ensure that their child had money for further education after high school. Around 10 percent of parents mentioned that a strategy other than the ones presented in Table 5.15 had been undertaken to ensure their child would have money for post-secondary education. For example, a strategy often mentioned by parents of Aboriginal students was accessing a band-operated fund for post-secondary education.

Peer Group

Students' completion of high school could be influenced by their social networks (see Chapter 2), including plans made by friends regarding further education. In the student baseline survey, the students were asked to think about different statements relating to their closest friends' attitudes and behaviours.

As shown in Table 5.16, the answers of project participants from both types of sites are quite similar. The majority of participants say that most or all of their closest friends: think completing high school is very important; are planning to further their education or training after leaving high school; and think it's okay to work hard at school.

Less than one in ten participants reported that most or all their closest friends had a reputation for causing trouble. One-third of the participants had close friends working for an employer or at odd jobs, such as babysitting. Very few participants at random assignment sites (3 percent) said that most or all of their closest friends skipped classes for a week or more. The proportion of participants with closest friends that had dropped out of high school without graduating was too low to be reported. It is worth recalling that these questions were being asked of students in Grade 8.

School Engagement

Research indicates that children and youth who are engaged with school are more likely to achieve success and become school graduates (Voelkl, 1995 and 1997). In order to evaluate high school engagement, the BC AVID Pilot Project baseline survey asked the same questions that were used to evaluate the degree of school engagement in the Youth in Transition Survey (YITS), developed by Human Resources and Social Development Canada in collaboration with Statistics Canada.

Table 5.15: Parental Actions to Support Their Child Financially in Post-Secondary Education (Percentage)

	RA sites	CS sites
None	28.0	29.5
Started a saving account	27.5	28.3
Started a Registered Education Savings Plan (RESP)	31.6	23.1
Made an investment such as mutual funds or a Canada Savings Bond	18.7	12.1
Encouraged child to earn money / get a job	12.7	9.2
Set up a trust fund for child	6.9	4.6
Encouraged child to work toward a scholarship	11.7	9.2
Started working or took an additional job	3.4	+++
Other	9.3	11.6
Sample size	**1,338**	**173**

Source: BC AVID Pilot Project parental questionnaire.
Notes: +++ Results are based on sample sizes that are too small for publication (less than five persons) or that could reveal small sample sizes by subtraction. Because some participants could be in more than one category, totals are not necessarily equal to all categories summed.

Table 5.16: Peer Group Attitudes and Behaviours (Percentage)

	RA sites	CS sites
Proportion reporting that most or all of their closest friends:		
Skip classes once a week or more	3.1	+++
Have dropped out of high school without graduating	+++	+++
Have a reputation for causing trouble	7.5	9.8
Think completing high school is very important	82.7	83.8
Are planning to further their education or training after leaving high school	74.0	71.7
Think it's okay to work hard at school	83.0	77.9
Work for an employer or at odd jobs like babysitting	32.1	34.7
Sample size	**1,342**	**173**

Source: BC AVID Pilot Project student self-completed questionnaire.
Notes: +++ Results are based on sample sizes that are too small for publication (less than five persons) or that could reveal small sample sizes by subtraction. Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

The high school engagement scale includes two components: academic engagement and social engagement (Statistics Canada, 2005).

Academic Engagement

Academic engagement is defined as identification with and behavioural involvement in the academic aspects of school. The academic aspects of school include students' dealings with teachers, curriculum and school governance. Academic engagement is broken down into two parts: academic participation and academic identification.

Academic participation concerns behaviours ranging from the student's acquiescence to the need to attend school and to be prepared for and respond to directions and questions through the student's demonstration of initiative-taking behaviours to the student's participation in the social, extracurricular and athletic aspects of school life. The latter can be in addition to or as a substitute for extensive participation in academic work.

Academic identification focuses on two components: belonging and valuing. Belonging refers both to the match between the student's perception of his or her needs and what the school offers and to the student's perceptions that they are cared about and respected within the school. Valuing refers to the student's appreciation of education-relevant goals.

Social Engagement

Social engagement captures the student's identification with and participation in the social aspects of high school. The social aspects of school are the informal, out-of-classroom interests and activities associated with

Table 5.17: Indicators of Academic Participation (Percentage)

	RA sites	CS sites
Proportion reporting that they spent 1 hour or more on average each week on:		
English language and literature homework	59.1	57.6
Math homework	68.8	57.0
Science homework	61.1	50.9
Proportion reporting that they spent 5 hours or more on average each week on:		
Homework and studies for all classes	60.3	45.7
Proportion reporting that they, at least one time:		
Skipped a class without permission this school year	14.1	12.1
Proportion reporting that the following statement is often or all the time true to them:		
I complete my homework on time.	73.5	59.8
Sample size	**1,345**	**174**

Source: BC AVID Pilot Project baseline survey.
Note: Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

Table 5.18: Indicators of Academic Identification (Percentage)

	RA sites	CS sites
Proportion reporting that the following statements are often or all the time true to them:		
I get along well with teachers.	79.2	75.7
I am interested in what I am learning in class.	54.1	52.3
I am given interesting homework.	18.4	16.1
Proportion reporting that they agree or strongly agree with the following statements:		
School is one of the most important things in my life.	85.8	79.7
Many of the things we learn in class are useless.	15.4	17.6
Most of my teachers don't really care about me.	9.6	9.3
Most of the time, I would like to be any place other than in school.	28.7	37.0
Most of what I learn in school will be useful when I get a job.	89.1	83.9
School is often a waste of time.	7.2	12.6
School is more important than most people think.	93.3	94.8
Most of my teachers do a good job of teaching.	92.3	91.9
My school is a place where I do not want to go.	10.5	14.5
Most of my teachers really listen to what I have to say.	83.3	82.8
If I need extra help, I will receive it from my teachers.	87.4	86.2
Most of my teachers treat me fairly.	93.0	96.0

Source: BC AVID Pilot Project baseline survey.
Note: Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

Table 5.19: Indicators of School Engagement (Percentage)

	RA sites	CS sites
Proportion reporting that they agree or strongly agree with the following statements:		
People at school are interested in what I have to say.	68.3	69.4
I have friends at school whom I can talk to about personal things.	85.9	86.7
I have friends at school who can help me with school work, if needed.	88.7	84.4
I feel like an outsider (or left out of things).	12.4	16.4
I make friends easily.	87.5	88.4
I feel like I belong.	86.9	85.2
I feel awkward and out of place.	11.2	15.0
Other students seem to like me.	92.2	92.5
Sample size	1,338	174

Source: BC AVID Pilot Project baseline survey.
Note: Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

school. Some examples are students' relationships with peers, their extracurricular activities and their contacts with teachers outside of the classroom. This is thought to be important because friendships, sports and leisure interests and a sense of identity with the school as an institution can motivate students to attend school.

Responses to these three categories of questions are found in Tables 5.17 to 5.19. Participants at random assignment sites seemed to report better academic participation than participants at case study sites did (see Table 5.17). Participants at random assignment sites spent more time studying and doing math and science homework and spent more time studying overall. More of these students completed their homework on time often or all the time. Responses on questions concerned with the level of academic identification and with the level of school engagement were similar at the two types of sites.

COMPARISON ACROSS COHORTS

The research sample of BC AVID Pilot Project participants at random assignment sites was recruited over the two cohorts. As discussed in Chapter 4, the standardized approach to recruitment and selection of the two cohorts could have differed in practice, as sites applied their experience with recruiting Cohort 1 to their recruitment of Cohort 2. The presence of AVID students recruited during Cohort 1 could have changed the context for recruitment of Cohort 2. Statistical tests were conducted in order to evaluate whether the characteristics of participants across cohorts were significantly different.

The statistical test applied is the chi-square test. The distributions of the demographic, academic and socio-economic characteristics of the sample were tested to detect significant difference across cohorts at a confidence level of 95 percent. For brevity, the tests are restricted to characteristics related to the AVID student profile and are conducted only for sites that recruited two cohorts, which excludes one random assignment site that recruited only a single cohort for the project and the case study sites. This section reports only on the characteristics that were found to differ significantly in their distribution across cohorts.

The tests suggest that two characteristics of the AVID student profile are not equivalently distributed between Cohort 1 and 2 participants. Those two characteristics are the average and receipt of additional academic support. It appears from Table 5.20 that more of the participants recruited in the second year—i.e. Cohort 2—had a higher average and that participants in Cohort 2 were significantly less likely to have received additional academic support in Grade 8.

The cohorts did not differ on any socio-economic characteristics associated with the AVID student profile. It should be noted that the above differences do not provide very strong conclusions about differences in recruitment and selection approaches used for Cohorts 1 and 2. First, there were more characteristics for which the cohorts were statistically indistinguishable than characteristics for which a difference could be detected. Secondly, the differences that do appear—centred on the academic performance of students—could reflect differences in the Grade 8 student body from whom the sample was recruited and selected and especially in those willing to apply to participate (see also Appendix B concerning students recommended by teachers who did not apply to join the project). Nonetheless, Cohort 2 includes more students already achieving a high average. This could reduce the scope for AVID to improve academic achievement for these students, a hypothesis that can be tested in later impact analysis on subgroups defined in terms of Grade 8 achievement.

Table 5.20: Comparison of AVID-Suitable Characteristics by Cohort (Percentage) —Random Assignment Sites with Two Cohorts Only

	Cohort	
	One	Two
Average		
B or higher	10.3	16.3
B–C	85.9	79.7
Below C	3.9	4.0
Does not receive additional academic support		
Never received support	73.8	79.1
Has received support, but not since beginning of school year	15.5	15.2
Has received support since beginning of school year	10.7	5.7
Sample size	**750**	**547**

Sources: BC AVID Criteria Scoring Summary; BC AVID Pilot Project parental questionnaire.
Note: Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

THE OUTCOME OF RANDOM ASSIGNMENT

Previous sections of the present chapter have compared the profile of BC AVID Pilot Project participants between random assignment sites and case study sites and across cohorts. This section compares participants in the program group and the comparison group at random assignment sites, describing the mean characteristics of the groups created by random assignment.[57]

Random assignment meant that project volunteers were allocated by a chance-based lottery into a program group offered a place in the AVID class or into a comparison group not offered a place in the class. This design, when properly implemented, ensures that the differences in the outcomes for each of the groups can be attributed to the offer of a place in AVID and not to other observed or unobserved differences in the groups to whom the offer was made.

SRDC implemented a carefully designed randomization procedure when assigning participants into the program and comparison groups to ensure that the lottery determining group membership was truly random. It is this rigorous application of the random assignment methodology that leads evaluators to expect equivalence in the two groups' average characteristics. Despite the fairness of the lottery, differences can arise in the sample characteristics after random assignment. These differences result from sampling variation and do not bias any resulting impact estimates.[58]

This section presents estimates of differences in program and comparison group characteristics at baseline for two reasons. First, reporting these characteristics provides some transparency in the evaluation, allowing the reader to develop confidence in the diligence of program evaluators in implementing the assignment. Second, if there are large differences between the experimental groups then this could justify methodological adjustments to improve the estimates.

Table 5.21 reports the means and proportions for selected characteristics in the comparison group and the program group. The table suggests that the program and comparison groups are very similar on a number of measurable dimensions.[59] The demographic characteristics of the program groups are substantively close to those of the comparison group. A notable exception is the proportion of boys in the program group, which is 3 percentage points higher than in the comparison group.

Table 5.21 also reports measures of schooling attitudes, behaviours and achievement. Among the 15 different outcomes reported in this part of the table, many differ by less than 1 percentage point. In only one is there a difference between the program and comparison groups larger than 2 to 3 percentage points. Program group members are roughly 6 percentage points less likely to have indicated that they hope to get a university degree. As described above, it is normal for differences such as this to arise from sampling variation.

57 Some students were randomly allocated to a third waiting list group at many sites, but they are not included in this analysis.
58 Larger samples lower the risk of having substantial sampling variation.
59 A statistical comparison of group characteristics is not presented in Table 5.22. The complex nature of the BC AVID Pilot Project design means that deriving and presenting the appropriate statistics requires calculations that take into account three factors: site-level variation in selection of participants, differing random assignment ratios and possible correlation between observations for sample members at the same sites. Such tests will be presented in future volumes that will rely heavily on such estimates to determine the statistical significance of program impacts, although the present report focuses on implementation, rather than the estimation of impacts. SRDC will release a separate working paper as a source of reference for readers who wish to understand the researchers' rationale, assumptions and analytical approach when deriving appropriate statistical comparisons for the BC AVID Pilot Project.

Table 5.21: Characteristics of Program and Comparison Group Members at Random Assignment

	Mean	
	Comparison	Program
Male (%)	44.5	47.5
Age (mean)	13.3	13.3
Currently receive additional academic support (%)	10.1	7.3
C–B average (%)	83.2	82.7
Parents contacted by school because of behaviour in last 12 months (%)	14.3	14.5
Did not miss a day since beginning of school year (%)	13.2	12.1
Missed 7 days or more since beginning of school year (%)	25.1	24.6
Does homework often or all the time (%)	81.6	80.9
Does as little work as possible often or all the time (%)	8.4	7.5
Completes homework on time often or all the time (%)	74.9	72.2
Takes notes in class often or all the time (%)	44.0	43.9
Studies notes taken in class often or all the time (%)	43.5	42.9
Aspires to have high school diploma or less (%)	1.9	2.1
Aspires to have trade/vocational certificate or apprenticeship (%)	3.4	5.4
Aspires to have college certificate or diploma (%)	15.6	18.7
Aspires to have university degree (%)	62.1	55.8
Does not know future education aspiration (%)	14.6	16.2

Notes: Group means are weighted to account for different RA ratios at each site and across cohorts.
Sample sizes vary for individual measures because of missing values. This could cause slight discrepancies in sums and differences.

6

The BC AVID Site Team Experience

Introduction

The present chapter describes the BC AVID Grade 9 experience from the time of AVID site recruitment in early 2004 through to the completion of Grade 9 for Cohort 1 in June 2006 and Cohort 2 in June 2007. First, staff preparations are discussed, including the recruitment and training of AVID elective teachers and other site team members. Next, preparations for implementing BC AVID electives are reviewed, in particular the AVID resources used by BC staff and scheduling the class. This is followed by a discussion of the implementation of BC AVID curriculum class, tutorial class and motivational activities, together with the experience of BC educators in implementing Year 1. The experience of BC AVID site teams is highlighted, with particular emphasis on the AVID elective teacher, AVID administrator, AVID coordinator and AVID counsellor. The chapter concludes with an examination of the spread of AVID Essentials and strategies beyond the AVID elective to other areas of school activity.

CHAPTER SUMMARY

- **The recruitment and training of BC AVID site teams was an important step in preparing to implement the AVID elective.** The recruitment and training of a strong AVID elective teacher was particularly important for successful implementation.
- **BC AVID elective teachers prepared for implementation by using AVID resource guides and curriculum.** Scheduling the AVID elective into the BC timetable and working with the schedule once it was in place have been challenging for many pilot sites.
- **BC AVID elective teachers included a variety of AVID activities and resources in implementing AVID curriculum classes.** Teachers included writing, inquiry, collaboration and reading strategies.
- **The implementation of AVID tutorial classes has been challenging for many BC AVID sites.** Finding and maintaining suitable trained tutors has required ongoing staff effort. Both AVID students and AVID tutors have required time to learn to use tutorial time effectively.
- **BC AVID elective teachers have used a variety of motivational activities with students, including team-building activities, special presentations and field trips.** Students have received information on various careers and post-secondary programs.
- **An active and involved site team can be an important support for BC AVID elective teachers during AVID implementation.** Site team members can assist in several ways, including mentoring AVID students.
- **There is some evidence of AVID Essentials and strategies spreading beyond the AVID classroom to other areas of pilot site activity.** The AVID Center encourages whole-school involvement, and AVID overlaps with other school programs.

DATA SOURCES AND LIMITATIONS

Both primary and secondary data are analyzed in this chapter. Primary data were collected by researchers from SRDC during 31 field observations and 57 interviews over a two-year period to accommodate the Grade 9 student experience at 18 Cohort 1 and 13 Cohort 2 sites. This included 55 interviews with BC AVID staff at pilot sites and two interviews with senior representatives of the AVID Center. SRDC researchers developed protocols for both the observations and the interviews to ensure that these qualitative data would be systematically gathered and able to address the question of whether or not implementation objectives were achieved.

Field observation notes recorded the AVID elective teachers' use of a variety of AVID curriculum activities and materials. The types of questions asked by participants, and whether and how teachers and tutors answered them, were recorded. Participants' responses to the AVID elective were noted by their observed attentiveness and participation in activities. Notes on the classroom environment were recorded for purposes of describing the implementation of BC AVID at the classroom level.

SRDC's initial implementation research plan included provision to observe one AVID class at each site per year. During Year 2, however, this was changed to observing both research cohorts at each site during the year in order to follow the implementation of the program for the two cohorts. Four staff members shared the observations, with attention given to alternating sites between staff to promote a better understanding of the intervention.

Depth interviews asked staff to describe their tasks as they relate to the implementation of BC AVID and probed whether there were parts of the tasks that might be problematic, in addition to those that ran smoothly. Staff were asked for their impressions of participants' responses to BC AVID and their feedback on whether and how the intervention might succeed.

The protocols for field observations and depth interviews were developed to gather much of the data needed to achieve SRDC's implementation research objectives—i.e. to determine whether BC AVID had a fair test in a real-world setting and whether the program delivery was consistent across sites, over time and across cohorts. It also served to document the program operations and record lessons learned, to help explain the findings produced by the impact analysis and to document the socio-economic environment. Other important sources of data—AVID Center certification and the project's support and feedback strategy (see Chapter 3)—began reporting as the period of observation for the present report drew to a close. Information from certification and the support and feedback strategy will prove critical to eventual conclusions about the quality of the AVID program delivered over 2007–10 at project sites. Reporting from the initial support and feedback strategy covered too little of the initial Grade 9 implementation to be included here.

SRDC researchers developed a framework for coding all of the data gathered for the following analysis through qualitative methods, and this framework was directly linked to answering the questions required to achieve the implementation research objectives. All transcripts and notes from qualitative data collection activities were coded using NVivo software to assist in the organization and analysis of the data.

Secondary data sources for the present chapter include the Project Operations Manual, notes from BC AVID training sessions and notes from the BC AVID conferences held in December 2005 and 2006.

STAFF PREPARATIONS

The recruitment and training of BC AVID site teams were important steps in implementing the AVID program in BC schools. Many AVID administrators paid particular attention to the recruitment of the AVID elective teacher, a role that is integral to successful program implementation. Initial training of site team members most often occurred at summer institutes in San Diego. As implementation has progressed, some schools have found maintaining a sufficient number of trained staff for their site teams a challenge.

Recruitment of the AVID Elective Teacher

According to a senior representative of the AVID Center, the position of AVID elective teacher requires a talented educator with experience and a strong set of educational skills and focus. An AVID elective teacher should also be versatile: "AVID teachers have to have great coping skills. They have to be able to think on their feet and modify things as they go. There may be a day where they have tutorials planned and one or two tutors don't show up....They have to be able to adapt."

BC educators also commented on the strong set of skills and stamina required for this position. They indicated that the AVID elective teacher should have strong leadership capabilities and that having both familiarity with group work and the ability to make strong personal connections with students was advantageous. Some staff commented that the AVID elective teacher should have the patience and skill to provide a lot of counselling for AVID students. As one AVID coordinator explained, "This AVID program is not just teaching AVID strategies, it's counselling. It's a lot of counselling, and it's saying you are here, you have potential and you need to be doing this."

BC AVID elective teachers commented on what initially attracted them to the AVID program. Some said that they found the program interesting and that it had good content. Others said they were pleased with the professional development opportunities. Some teachers said that they agreed with the need to provide services for middle-achieving students or that they believed strongly in the principles of the AVID program. One teacher commented: "The general concept of it really appealed because I really do care about kids and I care about the process of them learning how to be successful—not just go do it, but how. And so I agreed to take the training and be committed to the program."

Some English teachers who became AVID elective teachers said that they liked being able to teach skills that they had wanted to teach in their English courses but were unable to due to time and curricular considerations.

How Were BC AVID Elective Teachers Recruited?

BC AVID elective teachers were often recruited for the position by a school administrator at the time of site recruitment. At most sites, an administrator presented information at a staff meeting and discussed an upcoming session in Chilliwack to learn more about the AVID program and research study. A few staff attended this meeting, usually including the future AVID elective teacher, and brought information back to their schools for discussion.

At about half the sites, an administrator encouraged the AVID elective teacher to apply, while at other sites, the teacher had self-identified. The administrative role of either identifying a suitable staff member for taking on the very demanding role of AVID elective teacher or, at least, providing sufficient information for an interested teacher to self-identify appears to be important. This coincides with expected staff recruitment procedures at BC schools, particularly where a key staff member must be identified to undertake a demanding educational role. Several AVID elective teachers were already teaching English or humanities. Others were teaching math, science, language(s), special education, physical education, learning services or electives.

Due to staff relocation or a change in responsibilities at school sites, the staff member originally assigned to be AVID elective teacher sometimes changed. Some sites recruited a second or third time before beginning implementation in September 2005. Also, some sites experienced AVID elective teacher turnover before the start of program implementation for Cohort 2 in September 2006. A BC AVID administrator noted: "We have, as I think many schools have had a change....Our lead individual in this process left us to take another position at another school. So we had to recruit... from one of our AVID team members. We recruited a new AVID teacher."

Recruitment and Training of Site Team Staff

The recruitment of BC AVID site team staff often coincided with the school's involvement in the selection of pilot sites during the spring of 2004 (see Chapter 3) and preparation for early AVID training. Interested teachers and administrators often discussed their school's application to participate in the BC AVID Pilot Project at staff meetings. Once the participation of the site had been confirmed, administrators recruited interested teachers to be part of their school's site team and to take the Summer Institute training in August 2004. School staff trained in a variety of AVID roles, including AVID administration, AVID coordination, AVID tutorology (recruitment and training of AVID tutors) and subject areas, such as science, math and languages. Schools continued their recruitment and training of site team members during the 2004–05 school year and participated in Summer Institute training again, sometimes with additional team members, in August 2005.

Some BC AVID educators attended additional Path training sessions in Chilliwack in August 2006 and 2007. AVID Path training is designed to cover instructional strategies that will lead students to success and that will assist them with a rigorous curriculum. The Chilliwack training included AVID strategies and techniques for subject area teachers, those responsible for tutors and experienced AVID elective teachers. Site team members who attended generally spoke favourably of the training but not all sites were represented at these training sessions.

As Grade 9 implementation progressed and schools experienced staff turnover, some schools found it difficult to maintain trained staff for key positions, such as the AVID elective teacher, AVID coordinator, AVID administrator and district director. Several educators noted the importance of having one or more trained back-up AVID elective teachers in place to ensure efficient and continuous program implementation in the event of staff turnover. Some BC AVID staff members have encouraged the development of local training that would be less expensive and easier for staff to attend.

How Were BC AVID Elective Teachers Trained?
The large majority of BC AVID elective teachers took the AVID elective strand at Summer Institute in 2004 or 2005 before starting program implementation, as recommended by the AVID Center. Some teachers commented on how useful it was to have two years of Summer Institute training before teaching the AVID class. In addition to this training, some said that having a full year for preparation and recruitment of students was valuable (see Chapter 4).

Most AVID elective teachers who were part of the original site recruitment or who became involved by the summer of 2004, considered the amount of training received as part of their participation in the BC AVID Pilot Project sufficient, whereas some of those who were recruited later indicated that more preparation would have been beneficial. Some teachers said that they realized the magnitude of the AVID program and research study during training in San Diego or Chilliwack. An AVID elective teacher commented:

> *When I first heard about it, "Ah, this is great! You know, I have a few questions," and I went down to training and they'd answer one question and then I had five more.... [A]s each layer was peeled away, I realized what a huge program it was and what a huge responsibility it was.*

Even with sufficient training, some AVID elective teachers commented on feeling overwhelmed during the early stages of program implementation. An AVID elective teacher commented: "[I was] still feeling very much like I was in over my head because it is a lot of material and not just a regular class to teach. So just having a real grasp as to all the facets of the program was difficult, to begin with."

AVID elective teachers most often perceived AVID training as good professional development and very helpful preparation for implementing the program. They sometimes referred to AVID strategies as good teaching practices and indicated their familiarity with some of the strategies, such as collaboration. Some teachers said that during their training sessions, they found that they could easily identify students who fit the profile of AVID and needed the kind of support offered by the AVID program. An AVID elective teacher commented:

> *We have learning assistance and things like [that] for those who find school more challenging, but for the middle of the road [students] we didn't have much. And I think it was a point of frustration for me, so when we hit AVID, it was almost like it had been meant for me to see it—it was meant here. So that really rung [sic] a chord with me.*

Some teachers said that being involved in student recruitment before program implementation was also very helpful in preparing them for teaching the AVID class.

PREPARATIONS FOR THE BC AVID ELECTIVE

The AVID elective, as defined by the AVID Center, is an academic elective within the regular school timetable that includes AVID curriculum and methodologies, tutorials and motivational activities. Students stay together as a cohort throughout high school and receive support in their academic and social development from AVID staff, school administrators, tutors, parents and other AVID students.

This section provides information on the experience of BC AVID staff with two aspects of organizing their implementation of the AVID elective—using AVID program resources and scheduling the AVID elective. The AVID Implementation Guide (Swanson et al., 2004; hereafter, the Guide) and AVID curriculum library have provided AVID elective teachers with guidance and a variety of activities. Scheduling the AVID elective into the BC school timetable and working with the schedule once it is in place has been challenging for many schools for different reasons. Subsequent sections focus on the experience of BC AVID elective teachers in implementing AVID curriculum class, tutorial class and motivational activities with Grade 9 AVID students.

Year 1 Activities: What Defines the Grade 9 AVID Experience

AVID curriculum library provides an extensive assortment of AVID materials, lesson plans and activities for implementing the AVID program. BC AVID staff have used the library in implementing the AVID program. In particular, the Guide has been an important tool for teachers as they began implementation.

The Guide offers AVID elective teachers program information on important aspects of the AVID program, including Essentials, site plans and site teams. Included in the Guide is a variety of AVID classroom activities that are focused on a strong academic program, rigorous coursework and academic and social networks for students. Teachers can use these activities as they appear or adapt them to fit their particular students' needs. The activities assist students in developing study skills, organizational skills and leadership skills. The Guide includes an introduction to WIC-R—writing, inquiry, collaboration and reading (Swanson et al., 2004)—where students learn strategies focused on writing, inquiry, collaboration and reading. Some of the activities are outlined in Text Box 6.1 (see also the section entitled "Curriculum Class Implementation").

BC AVID staff were often introduced to the Guide during the AVID elective teacher strand at Summer Institute and then used the Guide in planning AVID program implementation for their own classrooms.

The Guide also offers a sample timeline with suggestions for inclusion of a variety of curriculum, tutorial and motivational activities planned on a daily, weekly and monthly basis. Many BC AVID elective teachers commented that they needed to modify the suggested timeline, as discussed below.

RESOURCES FOR THE BC AVID ELECTIVE

The majority of BC AVID elective teachers commented favourably overall on the AVID curriculum resources, noting the detailed instructions with the resources, the variety of lessons and the clarity of materials for teachers without an English background. Most staff had chosen a few activities to

Text Box 6.1: AVID Class Activities

Writing processes—Students learn the Cornell note-taking method and use learning logs to reflect on what they have learned.

Inquiry—Students learn to use Costa's Model of Intellectual Functioning in Three Levels and learn critical thinking skills through a form of debate called Philosophical Chairs and a deeper inquiry strategy called Socratic Seminars.

Collaboration—Students participate in group activities designed for effective collaboration. Information includes selection of groups and preparation for collaborative group work.

Reading—Students use text processing strategies, reading strategies and techniques like "KWL." Students define "what they Know" before starting a project, "what they Want to know" or learn and "what they have Learned."

Student binders and organization—Students learn to organize their daily school activities and assignments for all subject areas.

AVID tutorials—Students participate in study groups with AVID-trained tutors. Information includes variations on tutoring models, subject area tutorials and expectations.

Field trips and motivational activities—Teachers use methods designed to increase student interest in academic work and career options through field visits, guest speakers and team-building experiences.

AVID Good News and AVID Alerts—Teachers use techniques designed to acknowledge effectively the successes of AVID students (Good News) and how to take appropriate steps when students are not meeting AVID program expectations (AVID Alerts).

Community and student leadership—Students participate in activities designed to increase their involvement in communities and strengthen their capabilities as leaders.

start with and proceeded to use those in their curriculum classes with varying degrees of success. Teachers supplemented the AVID curriculum materials with their own materials in many cases or adapted the AVID version of a handout to fit their school.

Some AVID elective teachers indicated that it took them time to learn how to use the AVID curriculum, due to the quantity of resources, as well as their search for an appropriate timeframe for delivery of the program. They found the large quantity of materials overwhelming, particularly when coupled with insufficient time to become knowledgeable about them. They commented on needing time to digest the material and learn where to find things. One AVID elective teacher explained:

> *The curriculum library was a bit overwhelming because there was so much information. And so knowing where to go to find the information, or what was going to be most germane to what I was trying to accomplish at that point in time, like where to find things [was a problem at first].*

Many AVID elective teachers initially attempted to adopt a sample timeline provided in the Guide but found it moved too fast for students. Underlying this attempt at following the suggested timeline was a desire to follow AVID guidelines carefully to ensure successful implementation. Some teachers said, however, that the fast pace of instruction resulted in many students not grasping the concepts involved and their needing to repeat lessons. One teacher commented: "The most difficult thing was really following the AVID library in terms of the scheduled timeframe for certain topics and really feeling...'I better follow this exactly.' That was a big mistake."

Some administrators and coordinators also commented on the importance of teachers using their own understanding of what worked best when determining an appropriate pace for implementation. They pointed out that AVID was a four-year program and cautioned not to try to implement it in one year.

SCHEDULING THE AVID ELECTIVE

The AVID Center requires schools to schedule the AVID elective in their regular academic timetable and recommends daily AVID classes, in part to provide continuity for students. They acknowledge that scheduling the AVID elective is difficult for most schools. This has held true for many BC AVID sites, largely due to the patterns of scheduling in the BC school timetable. See Text Box 6.2 on timetabling BC AVID.

Some AVID elective teachers found that under a linear schedule where AVID occurs every second day, students do not attend AVID frequently enough to maintain momentum, leading to a lack of continuity for the program. Tutorials might occur less frequently, which could reduce students' opportunities to develop the skills necessary to use tutorial time effectively. There could be insufficient time for WIC-R in curriculum classes, particularly when tutorials need to be

Text Box 6.2: Grade 9 Timetable and the AVID Elective at BC AVID Pilot Sites

BC AVID schools have used two main formats for scheduling courses—a semester system and a linear system. The main components of each system that have been used for the scheduling of the Grade 9 AVID elective, as well as the school timetable as a whole, are outlined below:

- Ten pilot sites had a semester system for most academic subjects (two semesters per school year), with the AVID elective operating on a year-long linear schedule in which AVID occurred every second day.
- Eight pilot sites had a linear system for all (or most) subjects, which also resulted in the AVID class meeting every second day.
- When AVID was scheduled in a linear pattern, it was backed with another subject that occurred in the same timeslot as AVID but on alternating days. Half of the pilot sites backed AVID with physical education (P.E.), while the other half backed AVID with an academic course such as English.
- In a linear timetable, courses can occur at regularly scheduled times (same day and time) or in a rotating block (where day or time revolve). At more than half the sites, the AVID block rotated—AVID occurred every second day, or three times per week, or in a recurring pattern with AVID two times in one week and three times in the following week.

regularly scheduled as well. Themes may be interrupted and, as a result, both students and teachers can lose momentum. One teacher explained:

> *The way our program has set it up, with tutorials being on either Tuesday or Wednesday—whenever AVID hits each week, that's the tutorial—it means that…it's very rare to have two days [classes] in a row where you can do a lesson. So I find that a struggle because things seem quite disjointed, I think, to the students and even to myself [sic]. It took us about three and a half weeks to get a résumé created because of it, and that's something I could do in my regular planning class much faster.*

A linear or combined linear-semester timetable could contain fewer courses per day, resulting in longer class times, such as 70 to 90 minutes, for both academic courses and electives. Some teachers have found this length of class difficult for students. They said that it was difficult for many students to maintain focus for the entire class time, particularly if the class occurs at the end of the school day. Alternatively, a combined curriculum-tutorial class could result in insufficient time for both types of activities.

Scheduling the AVID elective in a linear pattern can also detrimentally affect the scheduling of other courses in the school timetable—in particular, for the block backing AVID (see Text Box 6.2). Some teachers commented that this posed problems for their school. The class backing AVID can experience the same challenges as some AVID elective teachers experienced in their AVID classes, such as behaviour challenges. Low enrolment in an AVID class can make it difficult to maintain sufficient enrolment in the block backing AVID. When an AVID student departs from the AVID elective during the school year, this can require changing other parts of the student's timetable. Some schools found that their timetable could not accommodate students being registered in both French immersion and AVID classes, and this forced students to choose one program or the other. When some pilot schools tried to back their AVID classes with a subject block taught by an AVID-trained teacher (so that AVID students could receive academic courses from AVID-trained teachers), they found it difficult to schedule students into that block, particularly when only one staff member was trained in each subject area.

BC AVID staff found that a rotating timetable can make it particularly difficult for schools to schedule tutors into AVID tutorial classes, as a set time and day for tutorials would often work better for the tutor's schedule. The rotating timetable can be difficult for tutors travelling from college campuses, as well as for high school student tutors travelling from a senior school to a middle or junior school (see the "How Have BC AVID Educators Scheduled Tutorials?" section).

Some case study sites found timetabling very challenging due to their small student population and limited course offerings, which could result in streaming students. When students enrolled in the AVID elective, it could affect their choice of academic class sections as well. This, in turn, could limit the composition of other courses in the school. An AVID elective teacher explained:

> *They took some electives that are different from each other, but for the most part they were all in one group of social studies, they were all in one group of English, and they were all in one group of French or Spanish….[T]he rest of the teachers really weren't exposed to that [AVID] group at all….[A]nd so the school itself was really distanced from the group because of the way the timetable had to be set up.*

Offering AVID outside the regular academic timetable could also pose problems. A pilot site that initially offered AVID outside their school's regular academic timetable experienced difficulties with student attendance as several students chose to attend extracurricular activities offered at the same time. This made it difficult for both the teacher and students to maintain continuity with the AVID program. Such

scheduling also does not meet the requirements of Essential 3, which states that the AVID elective must be offered within the regular academic timetable (see the "How Have BC AVID Educators Scheduled Tutorials?" section).

CURRICULUM CLASS IMPLEMENTATION

In AVID curriculum classes, students learn skills that are designed to increase both their understanding and academic performance, thus enabling them to learn more effectively. The AVID program provides a variety of curricula and materials that focus on study skills, organization and time management. As noted earlier, the study skills are organized under WIC-R. This section describes the experience of BC AVID educators in implementing WIC-R study skills during Grade 9.

Writing Strategy

BC AVID elective teachers incorporated a variety of AVID writing strategies in their Grade 9 AVID curriculum classes. Many of these strategies appear to have come directly from the AVID curriculum library, although teachers also supplemented the AVID materials with their own materials. Many staff commented on the overlap between AVID and non-AVID techniques. Some teachers spoke favourably about AVID writing materials, noting that they were plentiful and easy to follow. Some found that there were often more materials and activities than they could use. One AVID elective teacher commented:

> *The library materials are so well laid out. The entire project assignment is there. I find they're too big. We have to cut down on the time that we can spend on things…with the activities and the objectives and all the extension projects. I love the writing curriculum. We just can't do it all.*

AVID elective teachers with a background teaching English and those from other subject areas commented that having a background teaching English is an advantage when teaching AVID writing strategies due to the overlap with the English curriculum. Some staff with a science, math or other non-English background said that they experienced a steep learning curve when implementing these strategies.

During observations of AVID classes at pilot sites, SRDC researchers observed students using a variety of AVID writing strategies. Some of those observed more frequently include:

- Cornell note-taking method: students record main points on the right side of the page, questions relating to the main points on the left side of the page and a summary at the bottom of the page.
- Quick Writes: students complete a timed writing on a given topic. Some educators believe a timed writing is an easy form of writing for students to learn and can be a useful tool to get students to write with ease.
- Learning logs: students write reflections on what they have learned, how they have learned and how particular concepts apply to them. The reflection could focus on varied topics, such as a particular activity, report card grades, study habits or successes.
- KWL: before starting an activity, students record what they know and what they want to know; after completing the activity, they record what they have learned.
- Essays: students learn the various steps in essay writing, including introduction, topic, thesis, outline, planning and writing drafts. Some learn to edit a peer's essay. Autobiographical essays could be included.

Inquiry Strategy

BC AVID staff frequently used Costa's three levels of questions[60] as a technique for students to learn critical thinking skills. Many staff considered it a valuable tool for student learning but also found students challenged by this technique. It can be difficult for students to learn how to inquire and to learn how to use Costa's levels of questions effectively. As one teacher said, "'We spent many, many hours working on 'how do you inquire?'"

In addition, students must learn to pose questions with an increasing level of complexity, which can be difficult for them. An AVID elective teacher commented, "You have to pose questions in a million different ways for them to understand it, and that's just something I was used to doing prior to getting into AVID and it helped a great deal."

Many teachers found that it was difficult for students to move from the easier Level 1 to the more difficult Level 2, and some believed that Level 3 (the most difficult) was beyond most Grade 9 students' capabilities.

BC AVID staff varied their methods for implementing inquiry that can require ongoing practice. Some teachers focused on one level at a time, gradually moving to a higher and more difficult level. Other teachers introduced all three of Costa's levels as a unit. Learning inquiry methods well in AVID curriculum classes could assist students with their tutorial questions and tutorial process. Some teachers adopted a slower pace for teaching inquiry methods to Cohort 2 than they did for Cohort 1, as they believed this would be more effective.

Collaboration Strategy

BC AVID elective teachers frequently commented that collaboration or group work had been used in schools for a long time and that it was just good teaching practice. Most teachers were already using collaboration in some form in their classrooms before implementing AVID. They believed students could benefit from learning to work with a variety of others. AVID elective teachers used a variety of techniques to develop effective group work among students, including manipulating study group size and membership and using tables (see "Tutorials" below). Some teachers commented that students became more skilled over time and that some student cliques that were present at the start of the year broke down because

60 The Guide recommends Arthur Costa's Model of Intellectual Functioning in Three Levels and Benjamin Bloom's hierarchy of cognitive skills as questioning strategies for teachers and tutors.

of class interactions. The majority of schools reported that some students found collaborating difficult, possibly due to student preferences or learning styles. Inappropriate behaviour could also affect group interaction. As one AVID elective teacher explained:

> *There was a large number of kids in the class that just didn't like to work co-operatively. There were other people in the class who were immature. So any time you put them in a collaborative setting, it just became a goof-off time and horseplay, rather than a focussed learning kind of activity.*

SRDC researchers observed a variety of collaborative group work in AVID classes in random assignment and case study sites, in the two cohorts' sites and in AVID curriculum and tutorial classes. Interaction among students varied from engaged and interested to indifferent and sometimes disruptive (see also later sections on "Tutorials Class" and "Motivational Activities").

Reading Strategy

Most teachers indicated that of the four WIC-R strategies, they had the least experience with the AVID reading strategy. There was a variety of reasons for this. Some teachers considered it more important for students to learn writing, inquiry and collaboration first—in particular, to learn inquiry skills in order to participate effectively in tutorials. Some staff noted the abundance of activities available for writing compared to reading and that in some cases the writing activities included a reading component. Others noted that students already did many reading activities as part of their English program, such as reading novels and short stories, and did not want to duplicate what was being covered elsewhere. Several pilot sites already had silent reading programs as part of a literacy initiative, and some teachers thought that this reduced the urgency for the development of the reading strategy in AVID classes.

Some of the reading activities observed by SRDC researchers during observations of AVID classes at pilot sites included:

- strategic reading and scanning for information;
- learning how to read textbooks and chunking of information;
- looking at subheadings and focusing on analysis;
- bringing background knowledge in to interpret the text; and
- using a storyboard format for analyzing a non-fiction article.[61]

Some BC AVID staff commented on challenges that AVID students faced when learning reading skills and strategies. They said students could find it difficult to remain focused and sometimes need short reading activities. In addition, students sometimes found it hard to relate what they had read using their own words.

TUTORIAL IMPLEMENTATION

BC AVID elective teachers and other site team members have often been impressed with the AVID tutorial class and the learning opportunities it offers students, yet have found it challenging to put the tutorial into place at their schools. According to many teachers, the tutorial can provide students with much-needed assistance for difficult coursework and assist them in learning how to find information, although some schools experienced difficulties recruiting and maintaining suitable tutors for their tutorial classes. This section outlines the experiences BC AVID staff had in implementing AVID tutorials.

Who Serves as a BC AVID Tutor?

As noted in Chapter 2, the ideal tutor from an AVID program perspective is a college or university student who is a graduate of the school in which they tutor and who serves as a role model as well as a skilled tutor (Swanson et al., 2004). The majority of pilot schools found it difficult to recruit tutors with this profile, particularly during early program implementation. As reported in Chapter 7, the majority of pilot sites instead often recruited senior students from the same site as the Grade 9 class. These were frequently students that had already been trained as peer tutors to work with students on a one-on-one basis.

Peer tutors are also commonly utilised in isolated AVID schools in rural California. Some BC AVID sites recruited and trained their student teachers (or interns) as AVID tutors, and some sites used support staff, such as teaching assistants or First Nations support workers, as tutors. Other pilot sites, particularly those in settings that are more rural and without access to a college or university, recruited retired teachers or other community members as tutors, although they sometimes found this type of tutor less successful as a role model. As one AVID elective teacher noted, "Even though they were trained in the techniques, and the techniques made sense to them, the kids perceived adult teaching, not peer or college student helping."

How Have BC AVID Sites Recruited and Trained Tutors?

BC AVID sites often began recruitment of tutors during the start of the AVID program in September 2005 and continued to recruit during the 2005–06 and 2006–07 school years. Most sites initially recruited senior students at their schools, as they were more readily accessible than college or university students. BC AVID staff frequently found it challenging to recruit tutors in the first year due to the newness of the program, their lack of familiarity with the recruitment process and their large workloads. In addition, the BC teacher job action and strike in October 2005[62] resulted in a loss of momentum for some staff. While some BC AVID staff members were able to participate in tutor training before the October work disruption, other sites postponed their recruitment and training process.

As implementation progressed, many BC AVID sites focused on recruiting post-secondary students as tutors, as recommended by the AVID Center. It was easier for schools to recruit post-secondary tutors if: the school was in close proximity to a college or university campus; the school had one or more designated tutor recruiters and trainers; the tutor recruiter had good networking capabilities; and there was a suitable method in place to reimburse tutors. The majority of pilot schools have

61 A storyboard format breaks down an article or chapter into sections for closer analysis. For each section of the reading, students write a short summary, create an illustration and write a question. The number of sections varies.

62 The BC Teachers' Federation undertook a job action lasting four weeks, which restricted teacher participation in school activities and included a 10-day strike, in October 2005. Classes in all public schools were cancelled during the strike.

had at least one site team member who was not the AVID elective teacher designated as tutor recruiter or trainer. Some AVID elective teachers reported on how well the tutor recruiter or trainer performed at their school. At some sites, the AVID elective teacher led or shared the role, which could contribute to a very heavy workload. Some staff noted that recruiting tutors requires good networking capabilities. An AVID coordinator commented: "I think you have to find the right person to be the tutor recruiter. It comes down to that—find the right staff member. Our staff member just happens to have children that are tutor age that are in college."

BC AVID sites have received project funding to make payments to tutors; how schools have used these funds has varied due to different methods of paying tutors and union agreements. Tutors can be reimbursed through a bursary program where their hours worked as tutors are applied to a bursary fund in their name. This can work well when tutors are attending a college or university but can create problems for those who are neither currently post-secondary students nor planning to return as students. Tutors can be paid directly for their tutoring hours. Some BC AVID sites have agreements with their local union that represents school support staff that limit the number of hours of unpaid tutor time, the payment method and the personnel who can act as tutors.

How Have BC AVID Educators Scheduled Tutorials?

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How Have BC AVID Educators Scheduled Tutorials?

According to some BC AVID staff, scheduling tutors into AVID tutorials can be the biggest challenge faced by staff in implementing the AVID program, largely due to the rotating timetable, tutor availability and tutor turnover. The rotating timetable used in several pilot sites makes it difficult to offer tutors a set day and time, which many post-secondary students require to fit tutorials reliably within their own schedules. Similarly, tutors who are high school senior students need to schedule tutorials in a block that works for both AVID and their own schedule. This can be difficult for some students, particularly when they travel from a senior high school to a middle school. While senior, high-achieving students could be selected as tutors to represent potentially strong role models, they might also have heavy course loads. If so, this creates an additional challenge in scheduling. Schools that recruit students from their peer tutor program must ensure that the peer tutor schedule aligns well with the AVID schedule. Schools that use tutors who are student teachers often face a challenge from late April to June, when the student teachers return to school or the workforce. Scheduling AVID at the end of the day can be difficult, as students could be tired and less focused. While scheduling tutors outside the regular school timetable could work well for some tutors, it does not meet AVID program requirements (see Chapter 2). Most schools experienced turnover in tutors, leading to ongoing recruitment, training and scheduling challenges that represented additional work for AVID staff.

Where Are Tutorial Classes Held?

Most BC AVID sites used their regular AVID classrooms for AVID tutorials, with some schools using one or more additional rooms to accommodate student groupings. Many teachers commented on the advantages of tables for tutorials, as they believed that they enabled collaboration. Teachers in classrooms with movable desks and chairs, rather than tables, moved the desks and chairs into groups for tutorials. While multi-use spaces generally did not have AVID materials displayed, most AVID classrooms had a variety of AVID materials displayed, such as Costa's Levels of Questions and WIC-R posters, as discussed below (see "Motivational Activities").

What Was the BC AVID Experience with Grade 9 Tutorial Activities?

BC AVID elective teachers found that it took time, particularly during Year 1, for their tutorials to develop to match the AVID format, with students who understood the tutorial process and with tutors in attendance who were using appropriate questioning techniques. Students sometimes did not understand the format for questioning and could find it difficult to bring appropriate questions to tutorials. Other students might initially have preferred to do homework during the tutorial. An AVID elective teacher noted:

> *The tutorials were difficult to implement. Even as late as January, there were still students that weren't certain what the tutorials were about. And we explained it's not a homework session, it's [a] time to gain further understanding….It was a constant fight for some of these students to actually not bring their homework in and be doing that.*

Students could need time to learn the inquiry process—in particular, to move beyond a basic Level 1 question—and how to work together in tutorial study groups. At the same time, ensuring that sufficient numbers of trained tutors were present could be an ongoing challenge for sites. Some staff reported having no tutors on some days, while others had up to nine tutors in attendance. When no tutor was present, teachers frequently chose stronger students as group leaders for discussion purposes. How tutors used the AVID methodology varied. Some staff reported that their student teachers were very good with tutorial questioning techniques while others—in particular, some senior students—were often inclined to take a more direct "here's how you do it" approach.

Based on what teachers reported, as well as what SRDC researchers observed during classroom visits, BC AVID elective teachers used a variety of WIC-R activities during AVID tutorial classes, with particular emphasis on inquiry and collaboration. While students and tutors can experience difficulty learning to inquire effectively, many staff members were impressed with the effectiveness of the tutorial process in assisting students to access a rigorous curriculum over time. They reported that many students began to practice what they had learned in AVID curriculum classes about preparing questions that are more complex. While tutors are encouraged to direct student learning through probing questions, staff indicated that they had varying levels of success with this, and students sometimes experienced frustration when tutors did not give them answers.

SRDC researchers observed several Grade 9 AVID tutorial classes at pilot sites as part of the implementation research. Many AVID elective teachers followed an AVID-style tutorial model—students brought questions to class, divided into study groups based on subject areas and worked together to find answers to their questions. Some teachers had modified this process due to difficulties ensuring that students brought appropriate questions to class. Teachers (and sometimes tutors) divided students into appropriate study groups based on student questions and perceived ability to work together effectively. Students worked in both same- and mixed-gender study groups and often used small white boards in their groups as a tool for communication. At some sites, math was the dominant subject of choice for student groups. Students often searched for information in a textbook to find answers for their tutorial questions. The level of participation and interest among students varied and it became evident in sites with fewer tutors than groups that some students needed a teacher or tutor present at their group to maintain focus. Most teachers used at least some AVID materials, which they often adapted for individual school use. These include: a tutorial request form, where students recorded one or more questions to be answered during the tutorial; learning logs or tutorial reflections, where students recorded what they did, what they learned, what went well and what they found difficult; AVID tutorial evaluations, which tutors sometimes used to rate students in their study groups on aspects of their performance, such as work habits, attitude, participation and co-operation; and tutorial logs, where students recorded their tutorial summaries, sometimes in a Cornell note style.

MOTIVATIONAL ACTIVITIES

BC AVID elective teachers reported doing a variety of motivational activities as part of the AVID elective, including team-building activities during curriculum classes, special presentations and field trips. Teachers used motivational activities, such as word games and quizzes, from the AVID curriculum library and sometimes supplemented those with other activities from their own educational materials. Guest speakers from a variety of educational and career backgrounds, such as career counsellors and community members from a range of occupations, gave special presentations to students during AVID classes. Field trips included one to two day-trips to colleges and universities, as well as visits to museums, galleries and science exhibits. Site team members at some BC AVID sites took on the responsibility of making arrangements and assisting with field trips, while at other sites this was primarily the responsibility of the AVID elective teacher. Through these motivational activities, students have received information on topics, such as career path options, educational requirements for various careers, course planning, BC provincial exams and graduation requirements. They have been encouraged to "keep their options open" regarding their post-secondary education and career options, although some staff noted that some students might not choose post-secondary education. As discussed in Chapters 1 and 3, the BC AVID Pilot recognizes a variety of post-secondary options for AVID students, including university, community college, technical school and trade school.

Many BC AVID elective teachers displayed a variety of AVID motivational materials in their classrooms. These included: WIC-R posters; Costa's Levels of Questions posters entitled "Reach New Heights"; "SLANT," where students are encouraged to Sit in the front three rows, Lean forward (no slouching), Ask questions, Nod to show they understand and Talk to the teacher and Take notes; university and college posters or pennants; STAR note-taking strategy; AVID Good News; the AVID mission statement; and inspirational posters, such as "Attitude is a little thing that makes a BIG difference," "Dreams are not something to wait for, they're something to work for" and "Success starts by believing in yourself."

Text Box 6.3: AVID Staff Turnover

Pilot sites experienced considerable AVID staff turnover between the time of the AVID Summer Institute training in August 2004 and the completion of Grade 9 for research cohorts in June 2007. This turnover included changes among those holding the roles of core AVID staff—district director, AVID elective teacher, AVID coordinator, AVID administrator and AVID counsellor.[63]

- The role of district director changed at one-third of pilot sites before the completion of Grade 9—29 percent of research cohorts experienced district director turnover.
- In total, 58 percent of AVID elective teachers who taught Grade 9 AVID to research participants were involved with the project throughout the period from August 2004 to the completion of Grade 9.
- Half the pilot sites experienced turnover in the role of AVID coordinator from August 2004 to the completion of Grade 9 for research cohorts, while 44 percent of those positions were filled by AVID elective teachers who jointly held the role of teacher-coordinator (a very demanding workload, according to some teachers).
- One-third of pilot sites experienced turnover of the school principal before the completion of Grade 9 for research cohorts, while half of pilot sites saw turnover in the role of AVID administrator in the same period.
- Some 56 percent of AVID pilot sites had the same staff member holding the role of AVID counsellor between August 2004 and the completion of Grade 9 for research participants.

Although school and district staff (and the ASC) expected some AVID staff turnover during this period, the apparent high rate of turnover was unexpected.

What Do Students Like about AVID?

BC AVID staff commented on several things that their students had liked about AVID. Some teachers said that the organizational skills offered by AVID—in particular, the binder organization—were popular among many students. Some teachers said that even those who had departed from the program appreciated the organizational help. Others noted that students liked getting help with difficult material and appreciated the extra teacher time they had received. Some teachers said that many of their students liked the tutorials. Students had also frequently responded favourably to team-building exercises and a variety of motivational activities. Working collaboratively appeared to work well for many students, although a smaller portion of students preferred to work on their own and resisted collaboration. Some students liked the Cornell note-taking method. According to some teachers, students often acknowledged that AVID strategies had made a difference for them, but would not necessarily state that they liked doing the strategies, even if their grades had improved.

THE EXPERIENCE OF BC AVID EDUCATORS WITH YEAR 1

Previous sections have discussed how BC AVID educators have been both impressed with the AVID program and challenged by some aspects of program implementation. Many educators have praised the AVID program for different reasons. Some have said that the AVID program uses good teaching practices that have been very well packaged into a usable program and that the AVID Center provides excellent professional development. Others have views that accord with the AVID focus on underachieving students in the academic middle. Some have found that the goals of the AVID program align well with their schools' goals to improve rigour and literacy levels. Some have said that AVID teaches important study skills that many students have not yet learned and that they (and other teachers) do not have sufficient time to teach alongside required curriculum. BC AVID staff members have also experienced challenges in implementing the program, such as finding and maintaining a sufficient number of trained tutors and working AVID into their school timetable.

This section describes the experience of BC AVID educators with site team development, the individual roles of site team members and their collaborative efforts to implement the AVID program.

BC AVID Site Teams: Who Has Been Involved?

BC AVID site team involvement has varied at pilot sites. AVID Center's anticipation, as described in Chapter 3, is that a site team includes a minimum of eight staff members, including the core roles of AVID elective teacher, AVID coordinator, AVID administrator and AVID counsellor, who provide strong leadership in implementing the AVID program in their school. Many BC AVID elective teachers agree on the importance of a strong and involved site team for effective program implementation. They believe the ability of the site team to function cohesively as a support to the AVID elective teacher can be instrumental in the overall effectiveness of program implementation. According to AVID elective teachers, site team members can lend support in a variety of ways, such as: assisting with student recruitment; supporting the AVID elective teacher with various administrative tasks; mentoring AVID students; using AVID strategies in their own classrooms; recruiting tutors; communicating with school staff about the AVID program; and attending site team meetings regularly. This section reviews the turnover of core AVID staff at pilot sites (see Text Box 6.3) and outlines how BC staff carried out their roles as site team members—in particular, the core roles of AVID elective teacher, AVID administrator or district director, AVID coordinator and AVID counsellor.

63 The summary on site team membership and turnover is based on information provided by core AVID team members at each pilot site concerning their AVID site team membership for both the 2005–06 and 2006–07 school years, as well as on information provided during interviews and at Summer Institute training in August 2004.

BC AVID Elective Teachers

Many BC AVID elective teachers believe strongly in the goals of the AVID program. This could help teachers to maintain momentum in implementing what many also said was a demanding program. Becoming familiar with the AVID curriculum and finding an appropriate timeline for delivery was found challenging, as discussed in earlier sections. This section focuses on two overlapping responsibilities of the AVID elective teacher—tracking student progress and mentoring AVID students, both of which can require site team support and a willingness on the part of the AVID elective teacher to be supported.

Tracking AVID Student Progress

According to AVID program guidelines, an AVID elective teacher should monitor AVID student grades and work effort in all their subjects. This can require finding creative ways to maintain contact with each student's teachers. AVID counsellors can have access to student grades and be able to provide much-needed assistance. AVID elective teachers can help students learn the criteria for their report card and work ethic grades and help them with report card reflections. AVID students can experience an implementation dip during early program implementation that could cause some (possibly misplaced) concerns that the program is not working. When students change their method of learning and switch to a more rigorous curriculum, they can initially experience lower grades and frustration and can require extra encouragement, time and guidance before they see improvement. Tracking student progress to monitor this situation, and student progress more generally, can overlap with another AVID elective teacher role—that of mentor or counsellor.

Mentoring AVID Students

Several BC AVID elective teachers noted that AVID students can require a large amount of personal counselling and encouragement. Indeed, AVID elective teachers are expected to provide mentoring as part of the program. According to AVID elective teachers, there are several ways that they can provide mentoring support to students: by caring about them; by helping them build confidence; by creating a personal connection or bond with them; and by helping the student build trust. BC teachers have provided guidance and encouragement for AVID students in several ways, including: encouraging students to develop good study habits; providing them with organizational and time management skills; assisting them with understanding their post-secondary options; assisting them with class selection; encouraging them to request that they rewrite an exam, if warranted; advising them on where to go for specific services; getting lone students involved in group activities; and boosting student morale and self-esteem. Some BC AVID site team members have started working with their AVID elective teacher(s) to provide one-on-one mentoring for AVID students.

BC AVID elective teachers frequently noted that they did not anticipate the amount of time the AVID program required. Some teachers said that the heavy workload affected their other courses and personal lives. The mentoring role of the AVID elective teacher, in particular, demands time, as one AVID elective teacher explained:

> *The AVID elective teacher in a way is almost like a counsellor, in that the teacher is responsible for monitoring. "Hey, how's it going in science? How's it going in math?" And if things are starting to dip, well, a phone call home might be in order, or a parent meeting, or a meeting with an administrator. And with the number of kids you've got—28 or 30 in a class—plus your other classes and marking and everything else.... there just simply are not enough hours in the day.*

According to several BC AVID elective teachers, many students did not anticipate that AVID would be "this much work" and that it would require so much time and effort (on the students' part) to change their long-established and often poor work habits. At the same time, some staff expected more motivated students and fewer behaviour problems. Many students have (not surprisingly) required better organization and time management skills. It can take great patience for teachers to work with students as they develop better skills. According to many staff, AVID elective teachers have made major efforts to help students change their work habits and adopt AVID strategies. Some AVID elective teachers have used AVID tutors in curriculum classes to provide one-on-one assistance for students and to assist with binder checks.[64] Over time, many AVID elective teachers have learned to adopt expectations that are more realistic for student change. Several teachers commented on how a class size of 30 is too large when many students are struggling with learning new skills. An AVID coordinator said:

> *The biggest challenge is the class size, the 30 students, which isn't an abnormal class size, but...you have no really high role models in the classroom, whereas in just a regular classroom of 30 kids, you are going to have high, middle and low kids. There would be kids who are quiet leaders, showing the rest what to do. These [AVID students] are all kids who need help getting organized, getting motivated, getting their work done.*

Some BC AVID elective teachers said that students could find AVID strategies and expectations difficult to adopt for several reasons. Students could lack the determination to work hard. They might be expecting more fun and give up quickly. They might have few if any long-term goals and not anticipate the increasing demands of schooling. Their social needs might take priority over academic needs. They might not see the necessity for learning new study habits and could be resistant and non-compliant. Some students might expect that quick fix or a magic bullet will effect change, rather than their own work effort. Some teachers said that they needed to explain to students that academic success "does not happen to you," but that they need to be actively involved in making it happen.

Most schools have developed exit strategies for students who were not meeting the expectations of the AVID program over time. This has usually included a probation process where

64 AVID provides organizational skills for AVID students, including a method of organizing their papers and school materials in a single binder.

student progress is monitored closely, often involving meetings with parents, students and teacher(s). Some teachers commented on their frustration with the lack of parental support in this area.

BC AVID Administration

Responsibility for administrative roles has varied at pilot sites. Administrative tasks have included scheduling the AVID elective, maintaining support for the AVID elective teacher(s), communication with parents and students as needed, managing staff turnover, communication with school district or union representatives and (in some cases) managing school reconfiguration. The principal at many pilot sites has been pivotal in introducing the AVID program and pilot project to school staff and recruiting the AVID elective teacher. Alternatively, this has sometimes been the role of a vice-principal and district director. The authority of the person delivering the message could play an important role in the reception of the program and research project by school staff members. In the majority of pilot sites, the AVID administrator role has been occupied by a vice principal rather than by the principal. The AVID administrator is responsible for providing leadership for ongoing implementation of AVID at the school level. At some sites, vice-principals have served as AVID coordinators.

The district director at most BC sites has had an important role in introducing staff to the pilot project, recruiting site team members and overseeing the initial training of the site team. At a few sites, the district director has also held the position of principal or vice-principal. Some staff commented on the advantages of having the district director's office located at the pilot site. They believe this enabled the director to provide strong leadership more easily. At some schools, the district director had taken on some of the coordinating responsibilities, particularly while recruiting students and tutors. Some staff thought that the role of district director was important enough to be the primary focus of the person holding this position, rather than to be an extra demand that would be carried out when time allowed.

BC AVID Coordinator

The role of the AVID coordinator has varied at BC sites, and coordinating responsibilities have often been shared across site team members. Some AVID elective teachers have held the joint position of teacher-coordinator. In most cases, the occupant of this role found it too heavy a workload. AVID elective teachers have often worked with their site teams to share responsibilities. Some AVID elective teachers have found it difficult to delegate but told SRDC that this was an important step to learn. This AVID elective teacher explained: "I still feel that I have to still sort of be very much involved, which can be a little overwhelming at times….I have to basically delegate or ask for that help and when I do, the support is there."

Some of these shared tasks included scheduling site team meetings, assisting the AVID elective teacher with administrative tasks, recruiting site team members, planning and assisting with field trips, arranging guest speakers for the AVID class, monitoring AVID student progress, mentoring AVID students and assisting with AVID data collection. At some sites, the role of coordinator has not been clearly defined, which can produce difficulties for AVID elective teachers, as one teacher commented: "I don't think the program coordinator job was emphasized quite as much as it should have, how key that is, because we have gone through quite a bit of fluctuation as far as enthusiasm and things like that as a site team, as a result."

BC AVID Counsellor

BC AVID counsellors have carried out a variety of tasks, such as assisting with student recruitment, scheduling AVID students into their courses, assisting the AVID elective teacher with student progress, counselling AVID students (e.g. in connection with behavioural issues and non-attendance), assisting with student probation and departures and contacting parents as needed. It has often been the responsibility of the counsellor to ensure that students were properly enrolled. This included being registered in a language, such as French or Spanish. Some staff reported that their schools had more than one Grade 9 math course and that these varied in the level of rigour.[65] The majority of AVID sites reported students being appropriately registered to meet post-secondary requirements, although at a few sites staff said that some AVID students were registered in a less rigorous math or without the language requirement. A challenge faced by BC counsellors has been the need to adapt the California-based AVID counselling strand to fit BC school requirements for graduation and BC university entrance requirements (see Chapter 3).

Whole-School Activities

There is some evidence of the spread of AVID Essentials and strategies, such as inquiry skills, to non-AVID courses at pilot sites due to (1) AVID Center encouragement, (2) overlap between schools' peer tutoring and AVID tutoring programs, and (3) the harnessing of the AVID program at several schools as a means to fulfill their school's goals for program rigour and student literacy. These are outlined below.

The AVID Center encourages AVID-trained site team members to use AVID strategies in their subject area courses, not only for the benefit of AVID students but also for their other students. The most common strategy used in classrooms at pilot sites may be the Cornell note-taking method. Some teachers used a collaborative model in teaching their subject areas before AVID implementation. Some teachers have incorporated the AVID inquiry strategy (Costa's Levels of Questions) into teaching their subject areas. Student-teachers or interns trained as AVID tutors at some sites may have used their AVID training (on topics like inquiry and collaboration) in other subject areas. Some pilot sites may have established lunchtime or after-school study periods for any interested students as an easy addition to existing work of this kind with AVID students.

BC AVID tutors were recruited from peer tutoring programs at several pilot sites. While peer tutoring generally adopts a one-on-one style of tutoring and a more direct method of helping

65 The BC Ministry of Education recognizes three levels of math beginning at the Grade 10 level: math principles, the most rigorous and a prerequisite for many post-secondary programs; math applications, which are less rigorous but meet some post-secondary requirements; and math essentials, which are the least rigorous and do not meet most post-secondary prerequisite requirements.

students, some school staff believed that the way in which AVID tutors functioned when tutoring outside the AVID classroom could have changed from a method of giving the student the answer to the AVID approach of helping them find the answer. Peer tutors could use their inquiry skills with their classmates in senior courses. AVID tutors do not appear to be using an AVID tutorial format in other courses, in part due to pilot research requirements but also due to agreements between some school districts and their local unions concerning use of and payments to non-teaching staff.

The introduction of AVID at some BC sites overlaps with their school goals concerning development of rigorous courses and increasing student literacy levels. Some schools have introduced honours, enrichment, challenge, pre-advanced placement and advanced placement (AP) courses at their schools either before or since AVID implementation. Teachers at some pilot sites have received training in both pre-AP and AP in addition to AVID training, and other sites are exploring their introduction and preparing staff for this training.

OVERVIEW OF PROGRAM ACTIVITIES

The present chapter has examined how BC AVID staff have implemented the AVID elective at the Grade 9 level—their preparation for implementation; how they carried out the main components of the program; and their experience as educators with the AVID program. The implementation of the project has produced considerable program-related activity at sites, but from the data available so far it is not possible to draw firm conclusions on the quality of program implementation or the extent to which it adheres to AVID Center guidelines.

The recruitment and training of BC AVID site team members began in early 2004 and has continued over time due to staff turnover. BC staff used a variety of AVID resources to prepare for implementation and worked to fit the AVID elective into the BC school timetable. AVID elective teachers used their training and resources to implement AVID curriculum and tutorial classes and motivational activities. BC AVID site team members have provided support to AVID elective teachers and the program in several ways. There is some evidence that AVID strategies may have been used outside the AVID classroom at several BC sites.

7

BC AVID Participation Rates in Grade 9

Introduction

The BC AVID Pilot Project offers an elective that prepares students for entrance into a university or another recognized post-secondary institution. For students to benefit from BC AVID they must be exposed to the Essentials of the BC AVID curriculum. The present chapter explores the different components of exposure to the BC AVID program and what levels of exposure occurred among project participants during Grade 9.

BC AVID students participate in activities that include strategies focused on writing, inquiry, collaboration and reading to support academic growth in order to succeed in a post-secondary-focused curriculum. The major effects of BC AVID, if any, are expected to arise from student participation in the AVID elective, their placement into advanced courses and the tutoring they receive from post-secondary students. To see this effect of BC AVID as part of the BC AVID Pilot Project, it is assumed in the project logic model (see Chapter 2) that students participating in the BC AVID class need to receive sufficient exposure to BC AVID. The expectation of the developers of AVID is that students will spend 40 percent of their AVID elective time in curriculum class activities, 40 percent in AVID tutorials and 20 percent in AVID motivational activities delivered within the normal school academic timetable (see Chapter 3).

The tutorial is a key component of the AVID program. BC AVID classroom time devoted to AVID tutorials offers evidence of implementation of one of the most distinctive features of the AVID program. A sufficient number of tutors must be available in the BC AVID class to facilitate student access to a rigorous curriculum. Tutors would ideally be students from colleges and universities, and they must be trained to implement the methodologies used in AVID.

Specific information is needed to understand the nature and intensity of student participation in BC AVID class activities. Information collected from the pilot project sites for all program and waiting list students covers the following data areas: the occurrence of various AVID class activities; student attendance in AVID classes; student departures from AVID classes; student transitions on and off waiting lists; and tutor attendance in tutorial sessions.

The data used in this chapter cover the first year (Grade 9) of the pilot project from September 2005 to June 2006 for Cohort 1 and September 2006 to June 2007 for Cohort 2.

CHAPTER SUMMARY

- Pilot sites implementing BC AVID may not have succeeded in meeting the expectations of the BC AVID program for Grade 9. Some sites experienced difficulties recruiting and maintaining suitable tutors for their tutorial classes. This is not surprising considering the challenges of implementing a new program like BC AVID.
- AVID class absences grew during the first year (Grade 9) of implementation of AVID. This could decrease student exposure to the BC AVID program.
- There was a lower than expected proportion of AVID tutorial classes offered. The proportion of time devoted to tutorials (21 percent) is not consistent with the model in the Guide. Schools did not deliver any tutorial class activities to the program students in September and relatively few in October of Grade 9.
- The most important month for scheduling AVID motivational activities was May of each year, likely due to field trips and campus visits. To a lesser degree, February was also an important month at case study sites.
- The most common reason AVID students had for leaving the AVID class was to take other electives at the school. This finding provides evidence that BC AVID was competing for its students with other electives offered at high schools.
- The frequency of program students departing because they were asked to leave the class was lower for Cohort 2 than Cohort 1. Conversely, Cohort 2 saw a higher proportion of students leave because they switched schools.
- Departures from the class were not fully replaced by waiting list members. Expected class membership declined over time. This was a more or less uniform trend across cohorts and types of sites.
- About 86 percent) AVID program group students received 81 or more hours of exposure to AVID elective activities during the first year (Grade 9) of the pilot project.
- Tutors in the pilot project were young and tended to be high school students. In a departure from the ideal AVID model, most of the tutors were not pursuing post-secondary education.
- Just less than half of the Grade 9 tutorials featured the preferred ratio of one or more tutors for every seven program students.

AIMS OF THE ANALYSIS

This chapter provides descriptive analysis of how much exposure to the BC AVID project participants received during its first year (Grade 9). The analysis considers the types of program exposure and quantity of such exposure as a record of the program's implementation over this initial period. The actual impact of this AVID exposure on student outcomes, such as class attendance, student achievement, high school graduation and post-secondary enrolment, will be examined in later reports. For this reason, the information presented in this chapter does not attempt to compare the experiences of students in BC AVID with other students in Grade 9 as a whole.

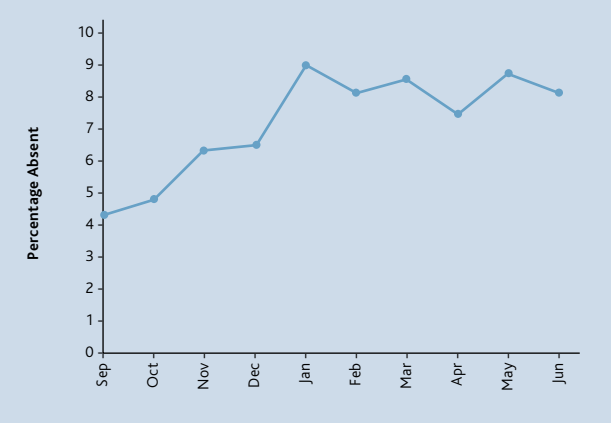
AVID CLASS ATTENDANCE RATES

Student attendance in the AVID class is an important outcome for program implementation. AVID teachers were asked to use SRDC's AVID student attendance form to record students' attendance in their AVID classes each day to ascertain student exposure to the different types of AVID classes. The proportion of students who attended each class has been calculated from these data.

Absences over Time

To determine whether the proportion of students absent from the AVID class changed over time, data on absences for all students allocated to receive the BC AVID program were calculated from September to June in each year of BC AVID Grade 9 program delivery, in both 2005–06 and 2006–07. For each day of each class, only absences of students who were members of that class on that day are counted. Students who had left the class or who had yet to join (i.e. on the waiting list) were not counted as absent. Figure 7.1 shows BC AVID class absence over time for all program participants allocated to the class (program group and waiting list members allocated to the class for the two cohorts in each month between September and June). The figure indicates that absences grew over time. For example, while absence of all program students was 4.3 percent of the expected class attendance in September, the percentage that was absent in June was 8.1 percent—a 3.8-percentage-point increase over the year.

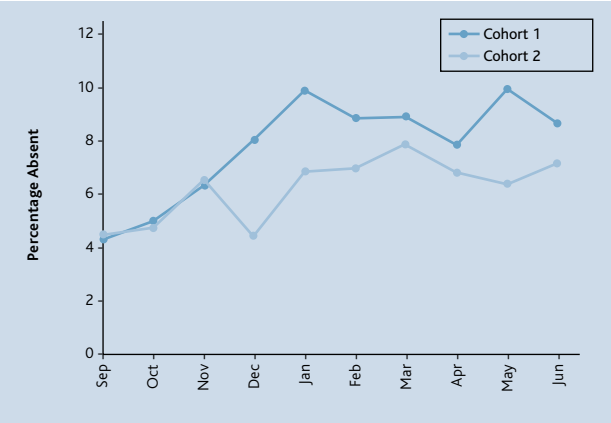
Figure 7.1: BC AVID Class Absences over Time for All Participants (Cohorts 1 and 2)



Source: SRDC calculations using AVID departure, waiting list and student attendance forms collected from the pilot project sites.
Note: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).

To determine whether attendance changed over time in a different way for each cohort, the same data were tracked for each cohort separately. The Cohort 1 figures include all program and waiting list students who started receiving BC AVID in September 2005; the Cohort 2 figures include all program and waiting list students who started receiving BC AVID in September 2006. Each cohort is followed for 10 months, and comparisons across cohorts indicate whether attendance differs over time.

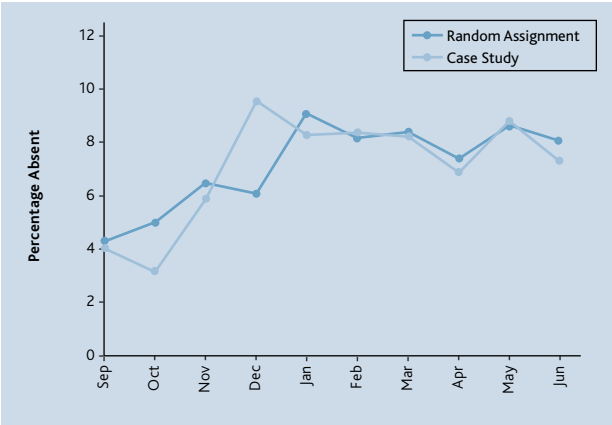
Figure 7.2: BC AVID Class Absences over Time between Cohorts



Source: SRDC calculations using AVID departure, waiting list and student attendance forms collected from the pilot project sites..
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

Figure 7.2 shows that absences for BC AVID program students in Cohort 1 steadily increased until the month of January and then levelled off. For example, the proportion of students absent from the expected class varied from about 4.3 percent in September to about 9.9 percent in January. This trend is similar to that for program students in Cohort 2, except that in December there is a sharp decrease in the proportion of the expected class who were absent. Expected class absence for Cohort 2 varied from about 4.4 percent in September to about 6.8 percent in January.[66]

Figure 7.3: BC AVID Class Absences over Time between Random Assignment and Case Study Sites



Source: SRDC calculations using AVID departure, waiting list and student attendance forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to group of students in each site. There is one site with two Cohort 1 classes.
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to group of students in each site. There is one site with two Cohort 1 classes.

The BC AVID Pilot Project involves 18 random assignment sites and four case study sites. Program students in the random assignment sites were randomly assigned to the BC AVID program, but program students in the case study sites were selected from among those eligible by the selection committee at each school who had knowledge of the students' academic performance and AVID eligibility scores. As suggested in Chapter 4, committees at case study sites tended to offer a place in the AVID class first to those students with higher AVID eligibility scores. It is plausible that this difference in selection, in addition to any inherent differences in school practices and student behaviour, could account for differences in the patterns of student attendance between case study sites and random assignment sites.

As shown in Figure 7.3, the trend in absences for AVID students in case study sites and random assignment sites over time was similar. The percentage of students absent from the expected class steadily increased until the month of December and then levelled off. For example, the proportions of students absent varied from about 4 percent in September to about 9.6

66 While it might prove interesting to compare these figures to absences for other students, comparable data for individual class attendance for similar students are not readily available. Later reports will make use of data from school records to calculate the impact of the offer of BC AVID on daily attendance.

Table 7.1: Characteristics of Students by Attendance

	All AVID students	Absence (times)		
	(%)	Never	1–6	7 or more
Gender				
Female	52.6	50.5	49.5	58.3
Male	47.4	49.5	50.5	41.7
Total family income				
Less than $20,000	8.6	2.8	8.9	10.3
$20,000–$30,000	6.5	6.4	6.6	6.5
$30,000–$40,000	8.3	8.3	8.3	8.4
$40,000–$50,000	7.6	6.4	7.9	7.5
$50,000–$60,000	7.9	8.3	6.7	9.7
$60,000–$70,000	8.9	11.0	10.4	5.6
$70,000–$80,000	8.4	7.3	8.3	9.0
$80,000 or more	33.1	34.9	32.6	33.3
Not provided	10.6	14.7	10.4	9.7
Site type				
Random assignment	87.4	87.2	89.4	84.1
Case study	12.6	12.8	10.6	15.9
Cohort				
One	62.4	55.1	58.8	70.7
Two	37.6	45.0	41.2	29.3
AVID eligibility score				
> Median	52.4	46.8	53.6	53.6
= Median	4.3	3.7	4.2	4.2
< Median	43.3	49.5	42.2	42.2
Sample size	949	109	519	321

Source: SRDC calculations using baseline information and AVID student attendance forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites in Cohort 1 (19 BC AVID elective classes).
There are 13 sites in Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to the group of students in each site. There is one site with two Cohort 1 classes.
AVID eligibility score was intended to indicate AVID suitability at recruitment (see Chapter 4). Accordingly, more suitable students would have received higher scores.

percent in December. This trend was similar for students of the random assignment program group, except that for these students the increase continued into January and then levelled off. The class absences for random assignment sites varied from about 4.3 percent of expected attendance in September to about 9.1 percent in January.

CHARACTERISTICS OF FREQUENTLY NON-ATTENDING STUDENTS

Absence from the BC AVID class could reduce students' exposure to BC AVID and reduce students' opportunities to benefit from the program. To determine the characteristics of those attending, Table 7.1 presents the characteristics of students who were never absent, absent one to six times and absent seven or more times. The table reveals the distribution of characteristics across the sample as a whole, as well as across those with specific attendance rates. Table 7.2 shows the distribution of attendance rates across the subgroups.

Table 7.2: Characteristics of Students by Attendance

	Absence (times)		
	Never	1–6	7 or more
Gender			
Female	11.0	51.5	37.5
Male	12.0	58.2	29.8
Total family income			
Less than $60,000	10.8	53.7	35.5
$60,000 or more	12.1	55.7	32.2
Site type			
Random assignment	11.5	56.0	32.6
Case study	11.7	45.8	42.5
Cohort			
One	10.1	51.5	38.3
Two	13.7	59.9	26.3
AVID eligibility score			
≥ Median	10.2	55.8	34.0
< Median	13.1	53.3	33.6

Source: SRDC calculations using baseline information and AVID student attendance forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites in Cohort 1 (19 BC AVID elective classes).
There are 13 sites in Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to the group of students in each site. There is one site with two Cohort 1 classes.
AVID eligibility score was intended to indicate AVID suitability at recruitment (see Chapter 4). Accordingly, more suitable students would have received higher scores.

Table 7.2 indicates that the highest recorded absences were among female students (37.5 percent of females were absent seven or more times, compared to 29.8 percent of males). In addition, Table 7.2 shows that students from families reporting lower income were more likely to be absent than those from families reporting higher income and that students from case study sites were more likely to be absent than were those from random assignment sites. It is worth recalling that the selection committee had more control over who was initially assigned to the BC AVID class at case study sites. About 42.5 percent of students from case study sites were absent seven or more times, compared to 32.6 percent for random assignment sites.

Table 7.2 shows that 38.3 percent of Cohort 1 students were absent seven or more times, compared to 26.3 percent of Cohort 2 students. There could be an association between students' suitability for the program inferred from AVID eligibility scores used in student selection (see Chapter 4) and attendance. Tables 7.1 and 7.2 suggest that students allocated to the class who were deemed more suitable for AVID were not necessarily the best attendees. The median AVID eligibility score for pilot project participants was 69. AVID students with eligibility scores below this median were better attendees than were students with scores above it.

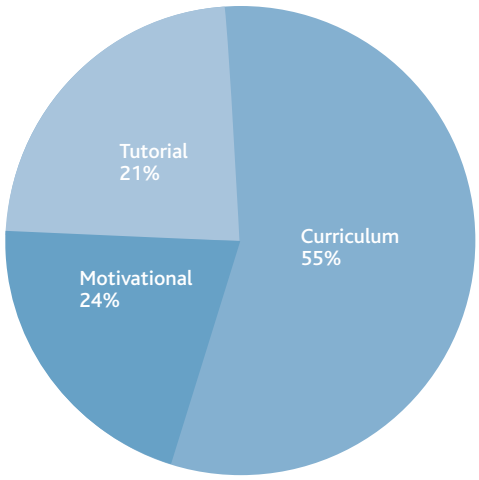
SHARE OF BC AVID CLASS ACTIVITIES

As mentioned earlier, for students to benefit from BC AVID they must be exposed to the Essentials. The AVID teacher records general AVID class activities (e.g. curriculum, tutorial or motivational activities) for BC AVID Pilot Project classes every day of the year, as well as their duration (in minutes per day). This information can be used to calculate the mix of AVID activities and to estimate the share of class activities between curriculum class, tutorial class and motivational activities that BC AVID program students were offered and received.

The expectation of the BC AVID program model is that students will spend 40 percent of their elective class time in the AVID curriculum, 40 percent in AVID tutorials and 20 percent in AVID motivational activities offered within the normal school academic timetable. Figure 7.4 shows that the share of BC AVID class activities for the first year (Grade 9) of implementation for each cohort did not correspond to the model. For example, 56 percent of the total hours of BC AVID elective time were spent in activities recorded as curriculum class, 24 percent on motivational activities and only 21 percent on tutorials.[68]

68 The average minutes spent in each separate BC AVID class activity by cohort and by site type was estimated, but it is not shown in the present chapter. The mean duration of curriculum class activities (see below) for Grade 9 was 63.7 minutes per session. The mean tutorial minutes and motivational activities minutes for Grade 9 were 61.2 and 274.3, respectively. The hours spent on field trips are likely to have raised the average minutes among sessions spent on motivational activities. These session duration estimates cannot be thought of as indicators of average class duration, because some teachers split each of their classes across two sets of activities, which has the effect of reducing the average minutes per activity.

Figure 7.4: Share of BC AVID Class Activities by Type (Cohorts 1 and 2)



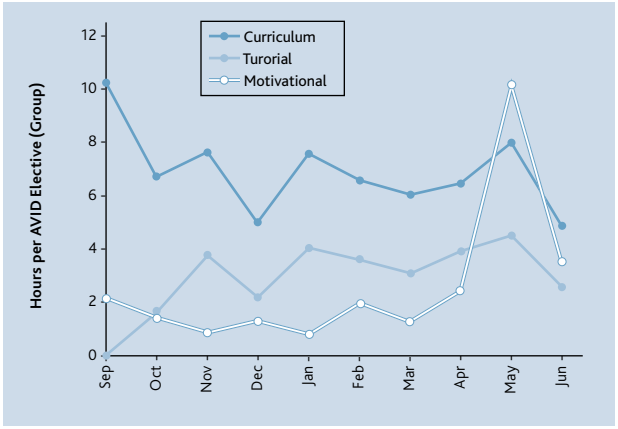
Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).

Teachers reported in interviews (see Chapter 6) that the curriculum class often included some motivational activities. Thus, there could be some overlap between the definitions of these categories. The choice to apportion time to curriculum versus motivational activities could have been arbitrary. This observation does not, however, explain the considerable shortfall in delivery of tutorial time compared to other activities.

VARIATION IN CLASS ACTIVITIES OVER TIME

The share of BC AVID class (curriculum, tutorial and motivational) activities for the first year (Grade 9) of the pilot project varied over time. The schedule for motivational activities might have a seasonal nature. Schools could have initially struggled to recruit tutors or to coordinate the full range of different AVID activities when they started to deliver BC AVID. To determine how the hours devoted to different class activities changed over time, the following figures provide estimates of the hours per AVID activity for each month from September to June of Grade 9 for each cohort. The AVID elective referred to in these figures is the group of AVID students attending a single class in each project site. There were 32 such classes in the project—one site had two Cohort 1 classes and one Cohort 2 class.

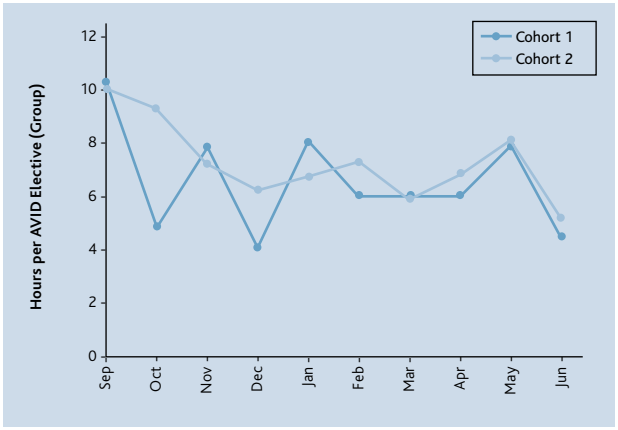
Figure 7.5: Hours of BC AVID Class Activities by Type (Cohorts 1 and 2)



Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
There are 32 BC AVID elective classes in the pilot project.
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

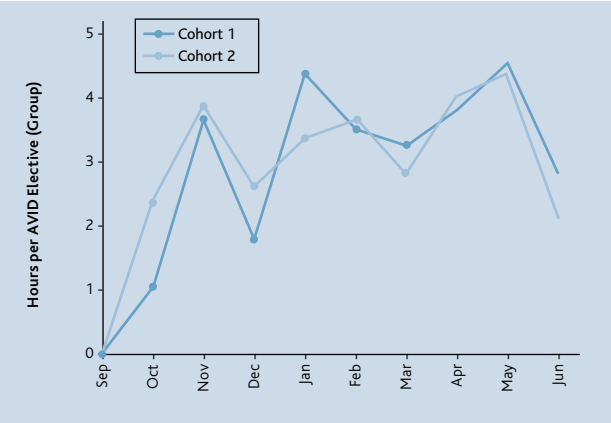
Figure 7.5 shows the hours of BC AVID class activities by month for curriculum, tutorial and motivational activities. There is a big disparity between the average hours per elective class devoted to curriculum class and the average devoted to tutorial activity over time. In September, average monthly curriculum and tutorial hours per elective class were 10.2 and zero hours, respectively. As shown in Figure 7.5, schools delivered more tutorials after September, but even by the end of the year, they still had not reached parity—in June, curriculum and tutorial hours per elective class were 4.8 and 2.6, respectively. Most motivational activities happened in the month of May (10.1 hours per elective class).

Figure 7.6: Hours of BC AVID Curriculum Activities between Cohorts



Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

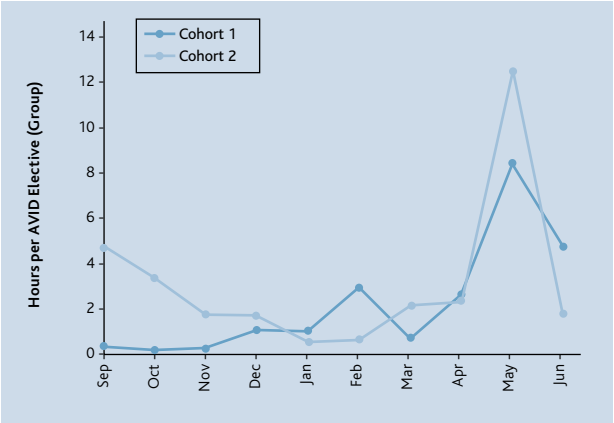
Figure 7.7: Hours of BC AVID Tutorial Activities between Cohorts



Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

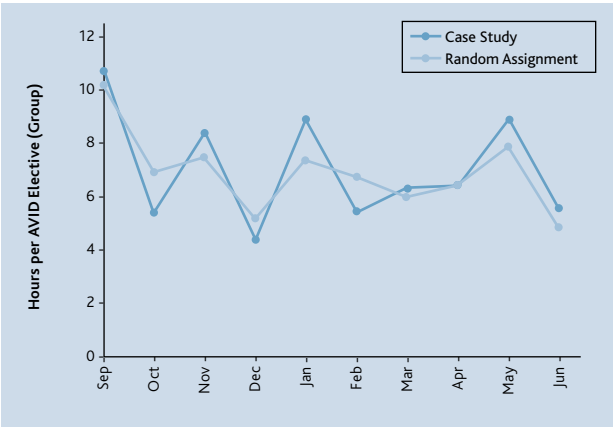
The disparity in durations of class activities could have varied across cohorts and over time. For example, the teacher job action in October 2005 could have reduced hours of class activities for the month of October for Cohort 1. To investigate this possibility, the hours per elective class for each activity were estimated for Cohorts 1 and 2. The trends for curriculum, tutorial and motivational activities reveal similarities across cohorts. Figure 7.6 shows that Cohort 1 curriculum class activities were reduced in October, probably due to the teacher job action in that month. Figure 7.7 shows that schools increased tutorial activities delivered over time. Figure 7.8 shows that both Cohorts 1 and 2 delivered most of their motivational activities in May; this was most likely accounted for by field trips or campus visits of many hours' duration.

Figure 7.8: Hours of BC AVID Motivational Activities between Cohorts



Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

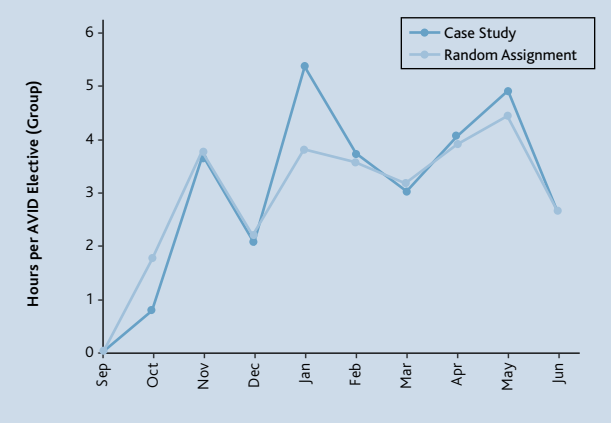
Figure 7.9: Hours of BC AVID Motivational Activities between Random Assignment and Case Study Sites



Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

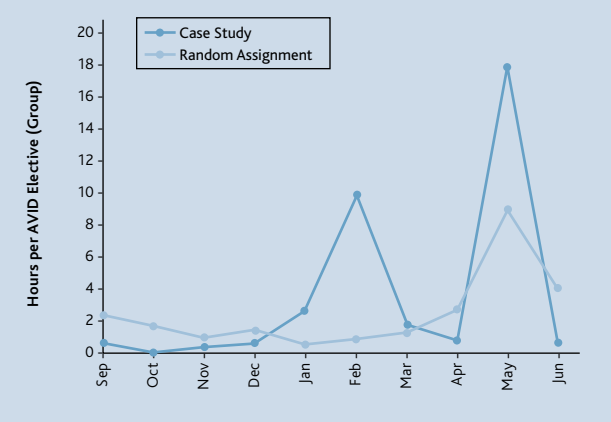
The trends for curriculum, tutorial and motivational activities reveal similarities between case study sites and random assignment sites. Figure 7.9 shows that curriculum class activities slightly decreased over time for both case study and random assignment sites. Figure 7.10 shows that schools increased tutorial activities over time in both case study and random assignment sites. Figure 7.11 shows that both case study and random assignment sites delivered most of their motivational activities in the month of May, in addition to an increase in February for case study sites.

Figure 7.10: Hours of BC AVID Tutorial Activities between Random Assignment and Case Study Sites



Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

Figure 7.11: Hours of BC AVID Tutorial Activities between Random Assignment and Case Study Sites

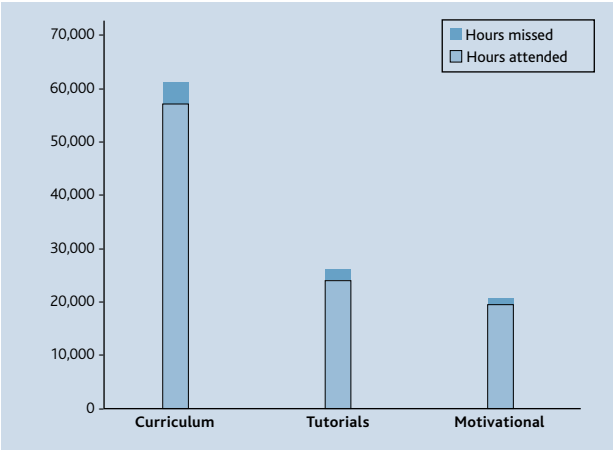


Source: SRDC calculations using AVID class activities forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

AVID STUDENTS' EXPOSURE TO CLASS ACTIVITIES

The analysis of non-attendance at curriculum class, tutorial class and motivational activities allows the calculation of hours of BC AVID exposure by program students. The horizontal bars in Figure 7.12 represents the total hours offered for each class activity. Some 61,510 curriculum hours were offered in the project in the first year, which was greater than the 26,030 hours of tutorial class time and 20,928 hours offered for motivational activities.

Figure 7.12: Total Attendance during BC AVID Activities (Cohorts 1 and 2)



Source: SRDC calculations using AVID class departure forms collected from pilot project sites.
Notes: The sample is limited to the first year of data collections of Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
A total of 175 student departures from the AVID class occurred during the first year (Grade 9) of the AVID Pilot Project for both Cohort 1 and Cohort 2.

Of all three BC AVID class activities, program group students tended to miss their tutorial class slightly more than their curriculum class and motivational activities. For example, estimates from Figure 7.12 shows that 6.8 percent of curriculum class hours offered were missed. Similarly, 6.7 percent of the hours offered for motivational activities were missed by AVID students. For tutorial class time, 7.7 percent of the hours offered were missed.

STUDENT DEPARTURES FROM THE CLASS

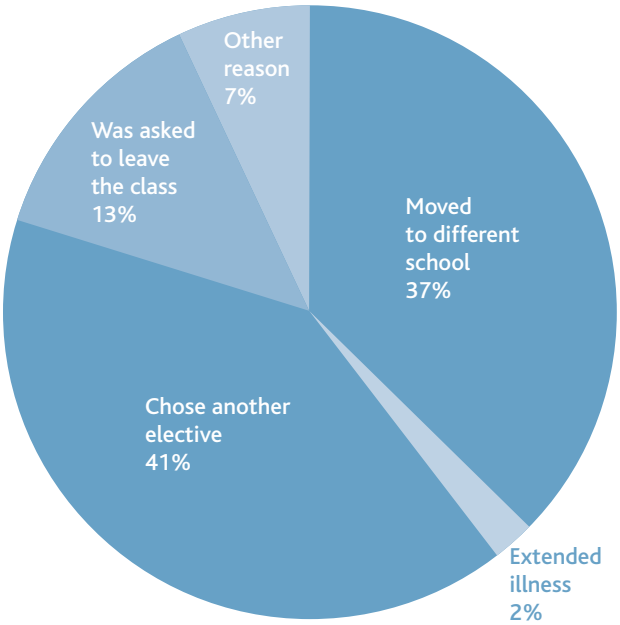
Program students could leave the BC AVID class at any time for reasons such as transferring to a different school due to a change of residence, extended illness, making the choice to pursue a different elective in place of AVID or being asked to leave AVID by the teacher. When a student leaves the BC AVID class, the student's exposure to BC AVID is of course affected, as is expected class membership. The latter could have ramifications for the viable delivery of BC AVID if the class becomes too small to run. Furthermore, the loss of many program group members from exposure to AVID could affect the conclusions of the pilot project. When students depart from the BC AVID class, it is important to know who left the class and why. Information has been gathered by AVID site team members using SRDC's student departures form, which records the reason for leaving the class.

Figure 7.13 shows the proportion of BC AVID class student departures for the first year (Grade 9) of the pilot project. Among students who left the BC AVID class, about 41 percent chose another elective instead. Students who left the class because they moved to a different school accounted for 37 percent of the departures. Some 13 percent of the departures were students who were asked to leave the BC AVID class. Extended illness and other reasons represented 2 and 7 percent, respectively.[69]

It seems that several students allocated to AVID became keen to take up other electives instead of BC AVID. Table 7.3 shows the range of student departures from the BC AVID class. The lowest number of departures from a single class was one, and the highest number was 14. The mean number of departures for the first year (Grade 9) of pilot project was six.

To further investigate departures from the BC AVID class, analysis was performed separately for Cohorts 1 and 2 program students. Figure 7.14 shows the percentage of program students who departed from the BC AVID class. The first two bars indicate that about 32 percent of the departures for Cohort 1 were accounted for by students moving to a different school, compared to about 46 percent for Cohort 2.

Figure 7.13: Proportion of BC AVID Departures (Cohorts 1 and 2)



Source: SRDC calculations using AVID class departure forms collected from pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
Some 175 student departures from the AVID class occurred during the first year (Grade 9) of the AVID Pilot Project for both Cohort 1 and Cohort 2.

Figure 7.14 shows that the percentage of students asked to leave the class was about 17 and 6 percent for Cohort 1 and 2 departures, respectively. The difference could possibly have arisen because teachers made better initial selections of students for the BC AVID for Cohort 2 than Cohort 1 (see Chapter 4). Expressed as a proportion of overall students recruited in each year, however, a similar proportion (one-fifth) of the two cohorts' students departed the class.

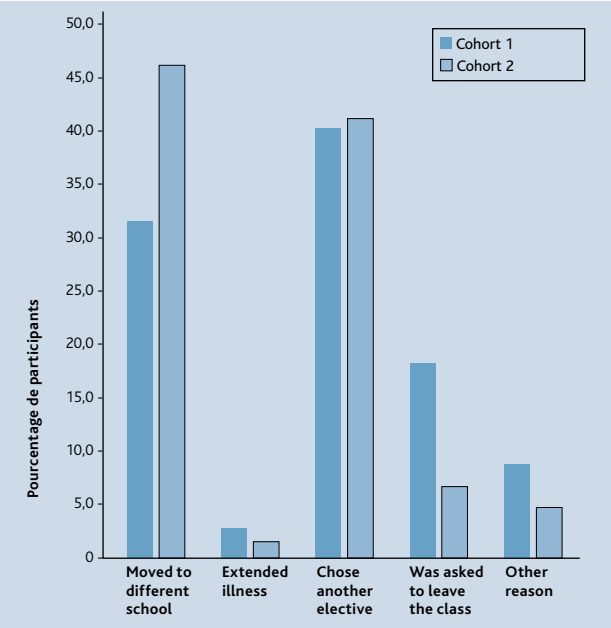
Table 7.3: Range of Student Departures from BC AVID Elective class

	Number of departures
Lowest number of departures per class	1
Mean number of departures (first year of pilot project)	6
Highest number of departures per class	14

Source: SRDC calculations using AVID departure forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites in Cohort 1 (19 BC AVID elective classes).
There are 13 sites in Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to the group of students in each site. There is one site with two Cohort 1 classes.
Some 175 student departures from the AVID class occurred during the first year (from assignment through to the completion of Grade 9) in the BC AVID Pilot Project.

69 An analysis of the distribution of departures—students asked to leave AVID class—by gender and AVID eligibility score for the first year (Grade 9) of the BC AVID pilot project was undertaken, but it is not included in the present chapter. The results indicate that more males left the AVID class than females—17.7 and 9.4 percent, respectively. Also, students with an AVID eligibility score below the median score for the pilot project were more likely to depart the AVID class—16.7 percent of students below the median score departed the AVID class, compared to 9.9 percent for students with scores greater than or equal to the median. Statistical significance testing was also undertaken, but it is not presented in the present chapter. The cohort and type of site comparison reveal no significant differences for the most part.

Figure 7.14: Percentage of BC AVID Departures between Cohorts



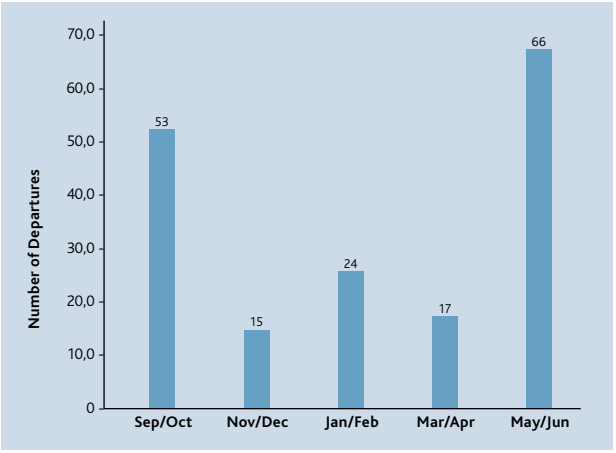
Source: SRDC calculations using AVID class departure forms collected from pilot project sites.

Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.
Some 175 student departures from the AVID class occurred during the first year (Grade 9) of the AVID Pilot Project for both Cohort 1 and Cohort 2. There were 112 departures for Cohort 1 and 63 departures for Cohort 2.

VARIATION IN STUDENT DEPARTURES OVER TIME

Another way of examining students' departures from BC AVID is to analyze variation over time. Departures were higher at both the beginning and at the end of the school year. Figure 7.15 shows 53 departures for the months of September and October. Similarly, in May and June, 66 program students departed.

Figure 7.15: BC AVID Departures over Time (Cohorts 1 and 2)



Source: SRDC calculations using AVID class departure forms collected from pilot project sites.

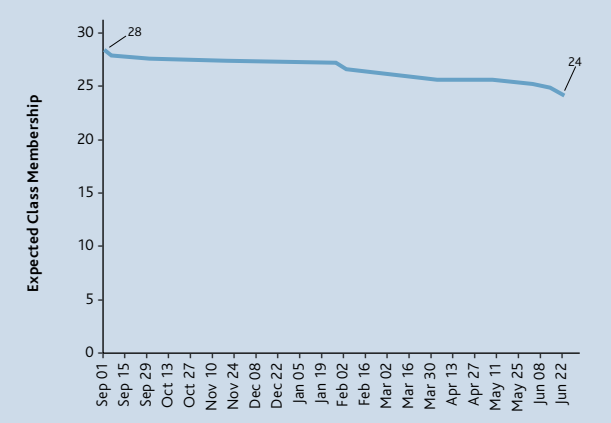
Notes: The sample is limited to the first year of data collections of Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
A total of 175 student departures from the AVID class occurred during the first year (Grade 9) of the AVID Pilot Project for both Cohort 1 and Cohort 2.

By adding in waiting list additions to the class and subtracting departure numbers over time, an analysis of the expected class membership can also be undertaken over time. This allows the calculation of average daily class size throughout Grade 9. The expected class membership is defined as program group plus waiting list students allocated to the class, less student departures from the class, for each month. Figure 7.16 illustrates a general decline in expected class membership over time. The expected class for September 1 was 28 students, which is slightly more than the expected class for June 30 (24 students).

Similar charts can be derived for the two cohorts and for case study site and random assignment sites in order to investigate whether there were variations between the different groups. Figures 7.17 and 7.18 show that the expected class for September 1 was 29 and 26 students for Cohorts 1 and 2, respectively. The expected class for June 30 was 25 and 23 students for Cohorts 1 and 2, respectively. Both cohorts experienced a decline in expected class over time.

Similarly, Figures 7.19 and 7.20 show the expected class for September 1 was 28 students for both random assignment sites and case study sites. The expected class for June 30 was 24 and 25 students for random assignment and case study sites, respectively.

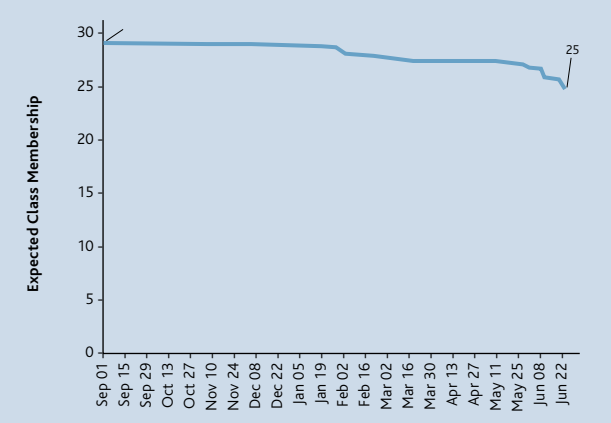
Figure 7.16: BC AVID Expected Class Membership over Time (Cohorts 1 and 2)



Source: SRDC calculations using AVID student attendance, departure and waiting list forms collected from the pilot project sites.

Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites in Cohort 1 (19 BC AVID elective classes).
There are 13 sites in Cohort 2 (13 BC AVID elective classes).
There are 32 BC AVID elective classes in the pilot project.
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

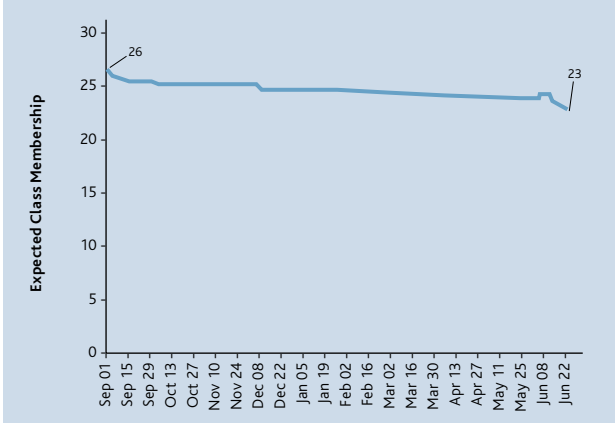
Figure 7.17: BC AVID Expected Class Membership over Time (Cohort 1)



Source: SRDC calculations using AVID student attendance, departure and waiting list forms collected from the pilot project sites.

Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

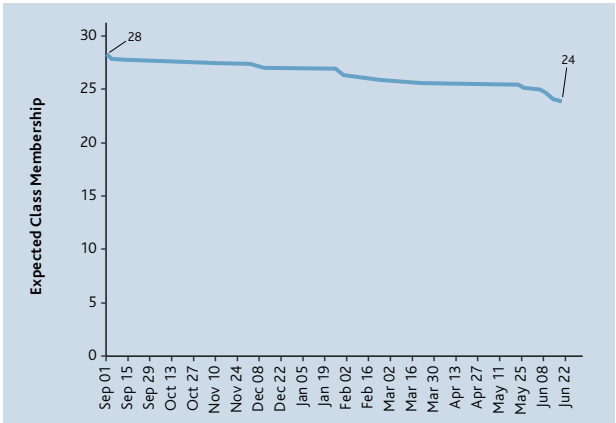
Figure 7.18: BC AVID Expected Class Membership over Time (Cohort 2)



Source: SRDC calculations using AVID student attendance, departure and waiting list forms collected from the pilot project sites.

Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

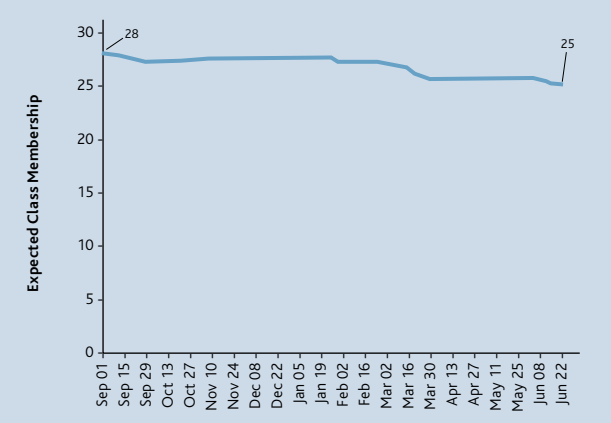
Figure 7.19: BC AVID Expected Class Membership over Time (Random Assignment Sites)



Source: SRDC calculations using AVID student attendance, departure and waiting list forms collected from the pilot project sites.

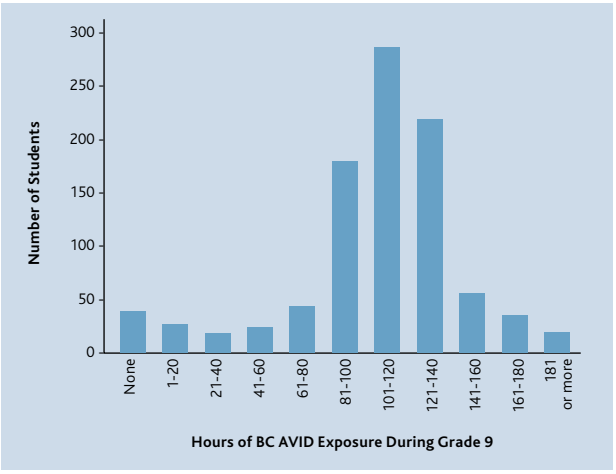
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

Figure 7.20: BC AVID Expected Class Membership over Time (Case Study Sites)



Source: SRDC calculations using AVID student attendance, departure and waiting list forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites for Cohort 1 (19 BC AVID elective classes).
There are 13 sites for Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to the group of students in each site.
There is one site with two Cohort 1 classes.

Figure 7.21: One-Year Cumulative Exposure to BC AVID for Program Group Students (Cohorts 1 and 2)



Source: SRDC calculations using AVID student attendance, class activities and departure forms collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
Data for this figure are restricted to students who were initially randomly assigned to BC AVID during the recruitment process.

CUMULATIVE EXPOSURE

As mentioned earlier, the major effects of BC AVID are expected to arise from student participation in the AVID elective. To better understand the cumulative exposure to the AVID curriculum, analysis of the hours of BC AVID class time experienced by students who were initially randomly assigned to the BC AVID program group during the recruitment process was conducted.

Figure 7.21 shows total first-year exposure of BC AVID among program group students. There has been a lot of exposure among majority of the program students. For example, 774 out of 901 program group students have experienced 81 or more hours of BC AVID exposure during their first year (Grade 9).[70] About 3.8 percent of program group students (34 students) experienced almost zero exposure to BC AVID. Figure 7.21 estimates about 31 percent of the program students (281 students) received 101 to 120 hours of BC AVID in their first year.

Cumulative total-year exposure was analyzed for key subgroups—that is, by gender, site type, cohort and AVID score. Table 7.4 reports the total first-year exposure of BC AVID class students.[71] Program students with higher family income were, on average, likely to receive more exposure to BC AVID—105.3 hours for family income less than $60,000 and 111.1 for family income of $60,000 or more. Table 7.4 also shows that Cohort 2 students, on average, were likely to receive more exposure to BC AVID than Cohort 1 students—113.3 and 105 hours, respectively.

TUTORS

The AVID tutorial is a core feature of AVID implementation. It is intended to support program students' learning in rigorous courses and to provide role models for their own transition to post-secondary education in the form of regular contact with post-secondary students.

The effectiveness of AVID tutorials will rely, in part, on the qualities and capabilities of the tutors who guide the AVID students as they attempt to navigate a rigorous, post-secondary-focused curriculum. The Project Operations Manual refers to the ideal AVID tutor as someone already enrolled in a college or university program, although this characteristic could in some cases be approximated by someone enrolled in demanding, senior, highly academic courses intended to lead to post-secondary enrolment.

During tutor training, information on tutors' characteristics was collected on a form that also collected tutors' consent to have their information analyzed in the project research. This information is examined below to learn more about tutors in the BC AVID Pilot Project and where they came from. Table 7.5 shows selected background characteristics of tutors.[72] The majority were females (76 percent, they tended to be young (70.6 percent were aged 19 or younger) and a fair number had tutor experience (35.4 percent reported some form of previous tutor experience). Table 7.5 shows that most of the tutors were not enrolled in a post-secondary program (36.5 percent of tutors were pursuing or had graduated from a post-secondary program).

70 A similar analysis as in Figure 7.19, but excluding field trip data, is not included in the present chapter. The result shows a very similar proportion—755 out of 901 program group students, or 84 percent—have experienced 81 or more hours of BC AVID exposure, excluding field trips, during their first year (Grade 9). Excluding field trips, however, brings the proportion with 121 or more hours of exposure down from 35 to 3 percent.
71 Statistical significance testing was undertaken, but it is not presented in the present chapter. While there are no significant differences for the most part, this message from analysis could be overlooked if only the significant differences were reported here.
72 Data used in Table 7.5 include all tutors who have signed consent forms to share their data, where SRDC had received the forms as of November 30, 2007.

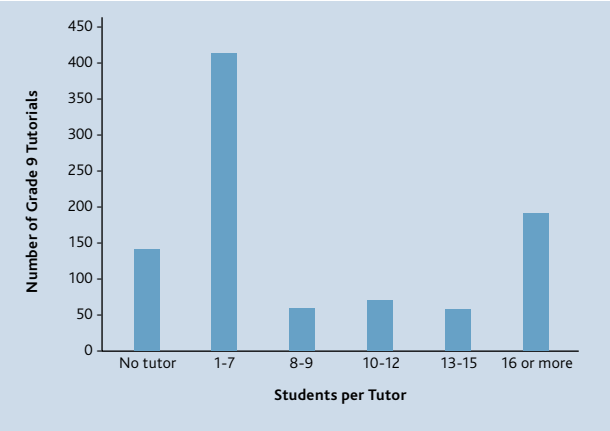
Table 7.4: Total First-Year Exposure to BC AVID Class Activities for AVID Students

	All AVID students (%)	Total year exposure (hours)		
		Mean	Standard deviation	Sample size
Gender				
Female	52.8	107.5	(40.5)	476
Male	47.2	108.9	(36.8)	425
Total family income				
Less than $60,000	50.1	105.3	(39.5)	451
$60,000 or more	49.9	111.1	(38.0)	450
Site type				
Random assignment	87.8	107.5	(38.1)	791
Case study	12.2	113.5	(43.2)	110
Cohort				
One	61.6	105.0	(35.6)	555
Two	38.4	113.5	(43.0)	346
AVID eligibility score				
≥ Median	57.5	109.8	(38.4)	518
< Median	42.5	106.0	(39.3)	383

Source: SRDC calculations using baseline information and AVID class activities, attendance and departure forms for original AVID students collected from the pilot project sites.
Notes: The sample is limited to the first year of data collections for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).
There are 18 sites in Cohort 1 (19 BC AVID elective classes).
There are 13 sites in Cohort 2 (13 BC AVID elective classes).
There are 14 random assignments sites (28 BC AVID elective classes).
There are four case study sites (four BC AVID elective classes).
BC AVID elective class refers to the group of students in each site. There is one site with two Cohort 1 classes.
Data for this table are restricted to students who were initially randomly assigned to BC AVID during the recruitment process.

To determine the number of tutors at each session, tutor attendance was gathered. The names or tutor identities[73] of all participating tutors were recorded, along with the dates and AVID class grades of the tutor sessions attended. According to Swanson et al. (2004), the ideal tutor session would exhibit a ratio of one tutor or more for every seven program students. Figure 7.22 shows the student-to-tutor ratio for Grade 9 across cohorts. Only about half (411 of 920) of the Grade 9 tutorials featured the ideal ratio of one tutor to seven program students or better. Figure 7.22 shows that 138 Grade 9 tutorials had no tutors.

Figure 7.22: Student-to-Tutor Ratio for BC AVID Tutorial Class Activities (Cohorts 1 and 2)



Source: SRDC calculations using AVID student attendance, tutor attendance, class activities, waiting list and departure forms collected from the pilot project sites.
Note: The sample is limited to the first year of data collection for Cohort 1 (September 2005 to June 2006) and Cohort 2 (September 2006 to June 2007).

73 Tutor numerical ID codes were used for tutors who do not want to share their information with SRDC and who did not sign the consent form.

Table 7.5: Tutor Characteristics

	Percentage
Gender	
Female	76.0
Male	24.0
Age	
14–15	2.2
16–17	53.6
18–19	14.7
20–24	12.7
25–29	6.0
30–34	3.0
35–39	1.5
40 and older	6.2
Previous tutoring experience	
Yes	35.4
No	64.6
Graduated from high school	
Yes	41.0
No	59.0
Currently attending school or college	
Yes	93.0
No	7.0
Type of school or college	
Post-secondary education	34.9
Post-secondary education graduate, not currently attending	1.6
Pilot schools	60.3
Other high schools	0.3
Other	3.0
How tutor heard about the tutoring opportunities with AVID	
Information session	10.8
Teacher	12.5
Posters and brochures	1.5
Word of mouth	54.3
Other	21.0
Where tutor heard about the tutoring opportunities with AVID	
High school	74.6
College / university	15.1
Other	10.3

Table 7.5: Tutor Characteristics (continued)

	Percentage
Reasons for becoming an AVID tutor	
Interested in becoming a teacher	
Yes	44.0
No	56.0
Work experience	
Yes	55.5
No	44.5
Financial benefits	
Yes	29.9
No	70.2
Want to help	
Yes	66.9
No	33.1
Other reason	
Yes	11.9
No	88.1

Source: SRDC calculations using AVID tutor consent form collected from the pilot project sites.
Notes: Information presented only for completed tutor consent forms received by SRDC before November 30, 2007.
There are 402 tutors in the pilot project who completed and signed consent forms.
Some 247 tutors participated in tutorial sessions for the first year (Grade 9) of the pilot project.

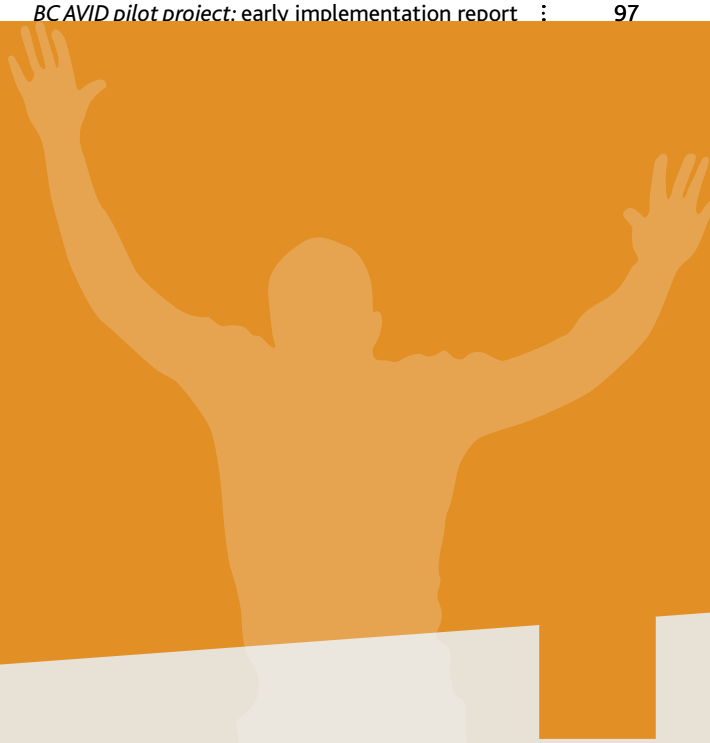
Schools could be struggling to find tutors and to deliver tutorials to AVID students. As mentioned in the review of implementation of tutorials in Chapter 6, some schools experienced difficulties finding and retaining suitable tutors for their tutorial classes.

CONCLUSION

The present chapter examined the exposure of BC AVID to program group students for their first year (Grade 9) of the pilot project, describing how program students attended and departed the BC AVID class. In addition, it presented how much exposure to class activities—curriculum, tutorial and motivational activities—students received, how the sites in the pilot project delivered the class activities and who was delivering AVID tutorials to the program students.

The results show that class absences grew over time and expected class membership declined. It appears that the project delivery of some of the BC AVID activities (notably tutorial class activities) was less frequent than expected and sufficient tutors were not available to deliver the ideal student-to-tutor ratio in the Grade 9 tutorial sessions. Logistical challenges starting a new program, as discussed in Chapter 6, could have made it difficult for some of the schools to deliver some of the BC AVID activities. Nevertheless, exposure to the BC AVID program was high. Nearly nine in ten of the program group students received 81 hours or more of BC AVID class activities.

Finally, the analyses show that the dynamics of attendance differed across participant characteristics. For example, males were less likely to be absent than females, and Cohort 2 participants had better attendance than did Cohort 1 participants.



8

Future Research on BC AVID

Introduction

The BC AVID program offers an elective to middle-achieving high school students to encourage their successful participation in post-secondary education. The evaluation of BC AVID seeks to understand many aspects of how the program might affect participants and other stakeholders. This chapter reviews the efforts planned for future evaluation research. It proceeds by describing the program and the manner in which evaluators expect invested resources to transform into intended outcomes. It then presents the methods and data sources that are employed in the evaluation. Next, the interim and longer-term outcomes are outlined. The plans for future implementation research and cost–benefit analysis are also described. The penultimate section explains the difficulties that arise in school-based program evaluation and how the research design will respond to those challenges. Finally, a description of the future reports is provided.

CHAPTER SUMMARY

- **The evaluation of BC AVID will use survey and administrative data to assess the program's impact.** The evaluation uses a random assignment experimental method to test for program impacts.
- **Interim impacts measure program effects up to the point when the participants are typically in Grade 10 or 11.** These outcomes include examination results, high school grades, attendance and class selection.
- **Longer-term impacts can assess the cumulative impact of the program.** The key longer-term impacts of interest are participation in post-secondary education and successful completion of the first year of the chosen post-secondary program.
- **Implementation research uses qualitative and quantitative data to answer important questions concerning how the program operates.** Implementation research describes whether BC AVID received a fair test and how environmental factors might influence its effectiveness. Additionally, the implementation research can uncover best practices in program operations and help explain findings from the quantitative assessment of program impacts.
- **The cost-effectiveness of the program is assessed using a cost–benefit analysis.** This analysis assigns a dollar value to all the costs and benefits to determine whether the benefits of BC AVID outweigh the costs for participants, governments and society as a whole.

THE BC AVID PROGRAM

The key component of the BC AVID program is an hour-long elective offered daily (or its equivalent)[74] to selected middle-achieving high school students. Students who might not typically take rigorous, advanced courses are encouraged to do so and are academically supported in the AVID elective. The class also provides instruction in particular skills, such as note taking and writing. Tutoring by local post-secondary and senior secondary students is also offered through the BC AVID program.

In order for BC AVID to lead to desirable outcomes, there must be some vital connection between the program elements and the outcomes. As discussed in Chapter 2, underlying the BC AVID program is a logic model that describes the expected inputs, the causal pathways and intended outcomes. This model assumes there are students eligible for AVID who have the potential to enrol in post-secondary education and, with the appropriate skills and support, take on more challenging schoolwork. It also assumes that without BC AVID this potential would not be realized. BC AVID will affect outcomes by equipping students with skills that transform them from passive learners to active classroom contributors and critical thinkers.

Vital inputs to the program include eligible Grade 8 students who are themselves willing to participate and have parents willing to allow them to participate. The program also demands teachers and other school staff to be active in delivering the program. Educational resources are required, including the availability of sufficient places at post-secondary institutions to accommodate any likely increase in participation generated by the program.

In order to assess whether these inputs have been transformed into the desired outcomes, the BC AVID Pilot Project is evaluated using a random assignment experimental method. After students volunteered for the program, gave informed consent (along with their parents) and met the BC AVID eligibility criteria, they were randomly assigned to either a program or a comparison group. The comparison group could participate in all the courses and activities normally available within the school and community. The program group was eligible to receive all the services associated with BC AVID. Because membership in either group was determined randomly, rather than by self-selection (or teacher selection), any differences in subsequent outcomes can be attributed to the program. Random assignment ensures that, at the outset, program and comparison group members are, on average, similar in characteristics. Comparing subsequent outcomes between the two groups therefore yields a valid estimate of the program's impact.

The evaluation research will use data from a variety of sources. Data collected through the administration of BC AVID will provide information about program content and participation, as well as the costs associated with running the program. Other administration data will be collected from participating school districts, the provincial government and post-secondary education institutions. School districts will provide data on high school course selection, attendance and achievement. The BC Ministry of Education will provide administrative data on high school completion, participation and achievement in provincial examinations. Information on post-secondary participation will be collected from the BC Ministry of Advanced Education and other administrative sources.

Another important component of the evaluation is a set of surveys undertaken throughout the study. The first survey collected data before the intervention had been delivered. This information, reviewed in Chapter 5, provided a baseline that can be used to assess the randomization process and to provide a comparison for how participants change over time. Follow-up surveys will be conducted when participants are in Grades 11 and 12. The Grade 11 survey will include BC high school students not participating in the pilot study, in order to collect information about the use of services similar to AVID. A final follow-up survey will be conducted 66 months after random assignment, when participants will be potentially in post-secondary education or the labour market.

Interim Impacts

In order to increase participation and completion of post-secondary education, BC AVID will first need to have an impact on a number of interim outcomes. Estimates of interim impacts help illuminate the early strengths and

74 As explained in Chapters 3 and 6, BC schools rarely have sufficient flexibility to schedule AVID for an hour each day. Instead, AVID is typically offered regularly (two to three times per week) in rotating blocks of 70 to 85 minutes in length.

weaknesses of the program and provide early indications of its potential longer-term impacts. For the most part, the interim impacts of BC AVID will be on outcomes measured by the time the typical student is in Grade 11, although some will not be observed until the completion of Grade 12.

The interim outcomes that will be evaluated are related to changes in behaviour and attitude that are expected before longer-term program goals can be reached. Initially, students assigned to the program group need to have consistent and persistent participation in BC AVID. The administrative data collected in the project's data collection forms will be used to determine how often BC AVID students attend AVID classes and the type of instruction that they receive in the classes. Although similar data are not available for comparison group members, these administrative data describe the extent of participation, which can help explain a potential lack of impacts if participation is low.

While participation in activities is vital among program group members, BC AVID can only have an impact on outcomes if membership in the program group provided participants with different or better services than were available to comparison group members. Data from the Grade 11 survey will be used to assess the extent to which BC AVID program group members received instruction and services not otherwise available. For example, students in the comparison group could have learned study techniques similar to those taught in BC AVID through other courses or extracurricular activities. The Grade 11 survey will ask program group members, as well as comparison group members, about their use of general and AVID-specific study techniques.

The Grade 11 survey will also be conducted among non-participating students both at BC AVID schools and schools without BC AVID classes. Because of the great potential for communication between teachers and students within schools, it is plausible that students in BC AVID schools will have been exposed to the programs' specific techniques and approaches. Assessing non-participating students' familiarity with the BC AVID curriculum will provide another comparison to help gauge the extent of spill-over within BC AVID schools.

If BC AVID successfully provides a level of support and learning experiences not otherwise available, then one might expect further impacts on other interim outcomes leading to increased participation in post-secondary education. These outcomes can be divided into those that change attitudes and beliefs about education beyond high school and those that improve the likelihood of success in participation.

Impacts on attitudes and beliefs that can be anticipated include improved interest and active participation in high school and greater orientation toward future activities. BC AVID might also increase awareness of post-secondary options, including knowledge of costs and financing. This awareness could change students' intentions to pursue post-secondary education and might lead to related changes in behaviour, such as saving for future education. Future research will test for impacts on these measures using data from the Grade 12 survey.

In addition to changing attitudes and beliefs, in order to improve post-secondary attendance, BC AVID must first encourage students to take the necessary steps toward meeting entrance requirements and gaining the skills required to pursue post-secondary education. Administrative data from participating BC school districts and the BC Ministry of Education will be used to measure potential improvements in preparation for post-secondary education. Specifically, BC AVID might increase timely high school graduation, reduce high school dropout rates, and increase grades, test scores and overall Grade Point Average (GPA). Students might also choose more advanced levels of core high school courses or more rigorous electives.

Any impacts on these interim outcomes will be described in upcoming research reports. This part of the overall evaluation will help explain the results in the longer-term outcomes, such as participation in post-secondary education, that are of ultimate interest.

Longer-Term Impacts

One of the great benefits of pilot projects on the scale of BC AVID is the length of the follow-up period. Students are followed for at least 66 months in the evaluation of the program. This permits evaluators to test for impacts on longer-term outcomes, which can reveal the cumulative impact of the program and provide a way to assess the net effect. These impacts cannot be fully understood without understanding how they relate to interim impacts. While desirable, very long-term impacts, such as post-secondary education graduation and post-graduation labour market performance, are not feasible under the current planned duration of the study.

The key longer-term outcomes of interest are enrolment in a post-secondary institution and successful completion of the first year of the chosen post-secondary education program. These impact estimates will rely on administrative data and responses to the 66-month survey. In addition to, or in the absence of, an impact on post-secondary participation, BC AVID might change the type of post-secondary programs chosen by students. Students that might have, in the absence of BC AVID, pursued a college or trade program might be both motivated and qualified to pursue an undergraduate level of university study. Similarly, after increasing students' awareness of the various options, BC AVID might change the field of study chosen.

BC AVID promotes education beyond high school because of the many benefits that are associated with higher levels of education, such as improved overall well-being. Future research will test whether BC AVID had an impact on measures of well-being taken from survey data. If BC AVID helps individuals achieve more fully their potential and make decisions based on a richer set of information, then one might hope that participants experience greater satisfaction with their life and feel that they have more control over their future. On the other hand, it is possible that the program raises expectations among participants who might not be fully prepared for higher levels of post-secondary education. Testing for impacts on well-being can determine whether BC AVID creates any unintended consequences.

Other indirect effects might be uncovered in future research. For example, even in the absence of an impact on PSE attendance, AVID might increase earnings and employment if students going directly from high school to work become more productive in the labour market because of BC AVID. It could also decrease earnings and employment in the short-term if more able and motivated participants are relatively more likely to attend PSE because of AVID. These potential outcomes will be explored using survey data that will provide information about the labour market experiences of study participants.

Future research efforts will also seek to discover whether the long-term impacts of BC AVID differed for subgroups of the overall sample. Because the process of random assignment ensures that program and comparison group members are, on average, similar, it is possible to divide them into subgroups based on their characteristics at random assignment and retain the experimental nature of the data. This enables researchers to test for differences in impacts based on gender, geographic region, socio-demographic background and even hypothesized level of suitability for the program itself. If there are some subgroups for which the program was more or less effective, this information will help program designers and decision-makers better target policy interventions.

Despite the considerable benefits of the random-assignment experimental methodology, some questions cannot be answered using this framework. Any question that involves a subset defined by a characteristic acquired after random assignment can not be addressed with simple comparisons between the comparison and program groups. In order to gain some insight into how AVID might influence post-secondary attendance, future work will consider students' reasons for attending or not attending post-secondary. This work will expand beyond experimental comparisons and use some non-experimental analysis. Also in a non-experimental framework, the perceptions of post-secondary education and experiences with post-secondary student life will be examined using survey data.

The Selection Process

One of the key components of the BC AVID program is the recruitment selection process (see Chapter 4). Potential students were selected according to a specific set of criteria. As described in Chapter 4, students can become eligible for BC AVID if they are in the middle GPA range but show signs of untapped academic potential and might benefit from BC AVID support in improving their achievement.

Future research will explore whether there is scope to improve on these selection criteria. If impacts are larger among certain groups, then it might be more cost-effective to target similar programs specifically to these groups. For example, although AVID is targeted at middle achievers, within this group of students there is a range of achievement, and the program might be more effective for relatively higher or lower achievers. Interim impacts that occur during the program can reveal whether various types of students respond differently to the intervention. Some groups of students could thrive or struggle in the program. This information can help program designers identify the best population. Longer-term impacts can describe who ultimately gains the most from the program.

Implementation Research

The implementation research for BC AVID employs both qualitative and quantitative data collection methods to achieve research objectives. While quantitative methods provide statistical estimates of program impacts, qualitative methods are essential to probe under the surface of BC AVID, helping to elucidate how the program operated and what role it played in participants' lives. The critical questions which implementation research seeks to answer include: Did the BC AVID elective receive a fair test? What environmental factors might influence the effectiveness of BC AVID? Has the implementation of the pilot project uncovered best practices that can facilitate or improve the operation of similar programs elsewhere? Finally, can aspects of the implementation research help explain findings from the impact study?

To collect qualitative data for the implementation research, SRDC researchers visited at least one class at every BC AVID site during the first year of operation. Based on the diversity of these experiences, researchers increased the number of site observations in the second and subsequent years. Observation and depth interview data collected during the first year of implementation, along with attendance data, have been presented in Chapters 6 to 7. Another important component of the data collection is the National Longitudinal Panel (NLP), which is collecting qualitative information from a subset of participants over time about their expectations and decision-making related to their life after high school.[75]

Implementation research will help researchers determine whether BC AVID received a fair test. Students selected for the program group need adequate exposure to the elective in order for it to have an impact; similarly, students assigned to the comparison group should not be participating in the BC AVID elective. Both follow-up surveys will include a module on the awareness and usage of AVID Essentials by program and comparison group students. In addition, the counterfactual experience will be profiled using school attendance data, classroom observations, survey data describing the awareness of the electives offered at schools and interviews with staff.

These analyses will also gauge how the implementation of the AVID elective varied across sites and over time. Reasonable consistency in the content and delivery of BC AVID is an important component of a fair test. Furthermore, consistent program implementation means that the evaluation can be interpreted as an assessment of the program as described in the Project Operations Manual.

The implementation research also records any environmental factors that have the potential to influence the success of BC AVID. Subsequent reports will summarize changes over the course of the project in the secondary school environment and the post-secondary environment, as well as labour market conditions and policies. Important environmental factors within secondary schools include the curricula and assistance available in the community for planning and making post-secondary and career choices. Examples of post-secondary and labour market environmental factors include changes in the availability of post-secondary opportunities,

75 NLP includes student panels taking part in BC AVID as well as in Future to Discover, a pilot project testing two other interventions being evaluated by SRDC for the Canada Millennium Scholarship Foundation.

major changes in student aid policy, shifts in the unemployment rate or wages and the occurrence of labour disputes at educational institutions.

SRDC will use data from secondary sources, such as the BC Ministry of Education, Statistics Canada and post-secondary institutions, to profile the environment within which BC AVID is taking place. In addition to accessing secondary sources of data, SRDC will probe participants' perceptions of the environment, awareness of post-secondary opportunities, potential barriers and strategies for overcoming them through the follow-up surveys, focus groups and the National Longitudinal Panel.

Another objective of the longer-term implementation research is to document the implementation of BC AVID. This descriptive analysis will provide a detailed account of all stages of the operation of the elective, beyond the recruitment and first-year implementation included in the present report. The purpose is to create a document of record and source of lessons learned about the delivery of BC AVID, serving as a roadmap for future implementation. All components of the elective—from the teacher training and student recruitment to the curriculum materials—will inform this analysis. In addition, depth interviews with BC AVID team staff, focus groups with students and parents and field observations will yield qualitative information about the operation of BC AVID.

Implementation research also endeavours to propose explanations for findings from the impact study. Depth interviews and focus groups with participants and staff, as well as field observations, will provide a foundation for further qualitative exploration along with the quantitative analysis of program impacts. Data from the National Longitudinal Panel will contribute to this understanding of impacts. The NLP is intended to generate a more in-depth understanding of how youths' decision-making changes over time, and this will be valuable to examine the timing and direction of changes in behaviour that the impact study detects.

Cost–Benefit Analysis

While the core of the BC AVID evaluation considers impacts on students, the program has indirect impacts on other members of society as well. There are costs and potential benefits that accrue because of the program that affect participants, the government and the broader population. To assess the total impact of the program, a cost–benefit analysis is undertaken. Cost–benefit analysis also suggests whether the program is cost-effective. This is vital information for decision-makers, who must distribute scarce funding among different interventions.

Cost–benefit analysis assigns a dollar value to all of the measured costs and benefits associated with the program. Many of the costs of the program occur within the study period, including direct program expenses, student tuition costs, student financial aid and forgone earnings while students are in the early years of post-secondary education. Standard data collection approaches, including the experimental impact estimates, permit the inclusion of these cost measures in the analysis. Other indirect costs, such as the participants' future forgone earnings and future direct education expenses, occur after the study period is over. In some cases, it is possible to make estimates and forecasts for these costs.

The potential individual benefits of PSE include higher future earnings and better health outcomes. Society could benefit as well through higher tax revenues and other indirect benefits associated with a more educated population, such as lower crime rates. Most of the benefits either occur after the study period is over or are very difficult to measure. Relying only on data from the study period would tend to underestimate the benefits of the program relative to the costs. This is balanced by the fact that most of the potential harmful outcomes, such as the risk of diverting students into streams of post-secondary education that do not match their skill level, are also observed after the study period.

Post-study costs and benefits can be estimated by combing extrapolated within-study costs and benefits, external survey data and academic studies that estimate the long-term returns to education. The estimated returns to education are still hotly debated in the literature—particularly the estimated returns for marginal individuals or those who might not attend post-secondary education without intervention.[76] Because of this difficulty in measuring costs and benefits, the analysis will present several estimates using different data and assumptions. Caution will be necessary in interpreting results from projected costs and benefits. Because the analysis uses data from a random assignment experiment, however, the estimates will provide relatively higher validity and reliability compared to other methods, such as observational studies.

RESEARCH RESPONSES TO THE CHALLENGES OF SCHOOL-BASED RESEARCH

In the past, social policy experiments typically involved financial transfers to individuals. In contrast, BC AVID is delivered to individuals within a classroom and school setting. There are many challenges, for both research and implementation, associated with school-based evaluation. First, considerable logistical issues arise when implementing a program in a school. Delivering an intervention through schools automatically creates a multi-site program, which means additional travel and coordination. Schools run on fixed schedules, meaning program activities must be organized within the confines of those schedules. Additionally, because the students are minors, extra care is required to ensure that they and their parents have given their informed consent to participate.

The need to coordinate the activities and harmonize the various views of many different stakeholders is common in all policy efforts, although these issues are heightened by virtue of the sheer number of stakeholders in school-based interventions. These include participants, parents, teachers, principles, union officials, school districts and provincial governments. Many of the interested parties will have worked together and interacted in other contexts. As a result, the program and evaluation study will represent just one concern balanced among many others upon which these individuals could not agree, which can further complicate the process.

76 A range of estimated returns to education are published annually by the Organization for Economic Co-operation and Development or OECD (e.g. OECD, 2006). For a review of the challenges associated with estimating returns to education, see Card (2001).

To give the intervention a fair test, it is essential that the program be delivered as designed. This means that the program should be delivered consistently across sites. It is, however, particularly difficult to ensure uniformity of the BC AVID program because classrooms are semi-autonomous. Moreover, potentially relevant factors, such as teaching approaches and styles, are difficult to observe fully, quantify or codify. Program staff and evaluators work together closely and intensively to ensure that the core elements of BC AVID are delivered across all sites.

In the context of BC AVID, program consistency need not mean perfect replication across sites. Flexibility is a feature of BC AVID and possibly contributes significantly to its success. Observed differences in program delivery that might be described as inconsistency can also be framed as accommodation of local circumstance and responsiveness to the needs of a particular class. This tension between consistency and flexibility adds an additional layer of complexity to the analysis of the evaluation data. Fortunately, the richness of the data collected can help distinguish between differences that constitute deviations from the core program and those that suggest adaptability. Furthermore, the evaluation can reveal whether adaptability is an important and desirable aspect of BC AVID.

An issue related to program consistency is staff and teacher turnover, which can weaken the program. Turnover increases costs, since BC AVID teachers require significant training. More importantly, to provide the intended mentoring role, teachers should have a long-term commitment. It is likely, however, that the teachers who are most motivated to participate in innovative programs like BC AVID are also more likely to pursue other new opportunities. Because of the vital nature of training, substantial program resources are allocated to ensure that new teachers are well trained.

In addition to the difficulties associated with implementing school-based programs, there are challenges that arise in evaluating these programs. Specifically, for AVID, there were a number of extra complications in the research design. In order to ensure sufficient sample size, the sample selection is complex. Eligible participants had a chance of being assigned to the program group that varied between sites, but that was approximately two in three. The chance of assignment actually applied at each site is known, and future research will take this into account.

Random assignment requires meticulous control over the recruitment process to ensure individuals are randomly allocated to the program group, comparison group or waiting list. Once an individual is assigned to one group, there can be no opportunity for her or him to be reassigned later to a different group.

The impact analysis also assumes that comparison group members do not receive the services that are being evaluated. Because researchers cannot control what is delivered outside the context of the program, there is scope for comparison group members to receive similar services. More broadly, evaluators assume that comparison group members are untreated by the introduction of the program, either directly or indirectly. There are many different ways that comparison group members might be indirectly affected by the program. For example, program group members might provide role model behaviour for friends who happen to be in the comparison group.

A Web survey of Grade 11 students at participating and non-participating schools will measure the extent to which non-AVID students might have received similar services. If the students at AVID high schools who were not assigned to the AVID program were nonetheless exposed to many of the same services, then the Web survey might also help identify additional comparison students not based at AVID schools.

UPCOMING REPORTS

There will be two major reports detailing the outcomes and issues described in this chapter. The first report, scheduled for release in December 2009, will cover impacts that have occurred up to the end of the typical participants' Grade 10, plus results from the Grade 11 survey. These results will cover some but not all of the interim impacts. Most of the outcomes examined in the 2009 report will be measured using administrative data from the school districts and standardized test results.

The second report, scheduled for release in October 2012, will assess the full impact of the program on the participants' lives when they were in their senior years at high school and their first potential year of participating in post-secondary education, the labour market or non-market activities. It will draw on data from all available sources—the Grade 11 and 12 surveys, 66-month survey, administrative data and qualitative data. All of the interim impacts, as well as the long-term impacts, will be presented.

CONCLUSION

In the next phases of the evaluation, a wide range of outcomes will be studied in order to determine the effectiveness of BC AVID. The key outcomes of interest are enrolment in and completion of the first year of post-secondary education. Other interim impacts will be studied because these estimates contribute to an understanding of the achievement of the program's longer-term goals. Implementation research will contribute to the overall understanding of how the program affected individuals. The programs' cost-effectiveness will be assessed using a cost–benefit analysis. The study will draw on data from a variety of sources, including administrative data from school districts and provincial ministries, survey data and school-based data collection forms. In the future, two major reports will be published that describe BC AVID's impact on interim and long-term outcomes.

APPENDICES

APPENDIX A: Theories that Potentially Underlie AVID's Impact on Students' Educational Outcomes

CONTROL (OR CHOICE) THEORY

Addressing the effectiveness of a group study, rather than an individual-based one, Glasser (1986/1998) advocates the adoption of a classroom structure built on the concept of learning teams that allow students to work together to achieve a goal, rather than working in isolation. According to Glasser, learning groups satisfy for students the four basic psychological needs: belonging, power, freedom and fun. Glasser points out that learning teams help students realize the connection between power and learning and that once students make this connection, they become independent learners. The ability to learn and think independently allows students to go on to make the most of their education, careers and lives.

The AVID program promotes collaboration and independent learning among its students by providing a forum in which students are simultaneously nurtured and challenged. Ideally, students work collaboratively in both their AVID curriculum classes and tutorial study groups. By working in study groups, students learn to trust their fellow students to support them in their learning.

Glasser emphasizes that for learning groups to work, the classroom must become student-centred rather than teacher-centred. The teacher must stop feeling responsible for doing the learning[77] and start managing the learning instead. The responsibility for learning then shifts to the student, with the teacher acting as a facilitator in the learning process. In Glasser's model, the manager-teacher moves from group to group, listening, advising or intervening as necessary.

The AVID program recommends that for 40 percent of its class time, students interact not directly with the teacher but with tutors and each other in tutorials—known as collaborative learning. Managing the classroom, instead of being its centre, frees the teacher to look at the classroom's overall structure and use teaching approaches that are more creative. At the same time, this permits students to work from one another's strengths to understand concepts.

SOCIO-CULTURAL THEORY AND SOCIAL CONSTRUCTIVISM

Existing research suggests that there is a need to improve instructive practices both to support a range of different learning styles and to help young learners build their knowledge effectively (Wells, 1997). Socio-cultural theory and social constructivism, two closely related theories of learning, provide concrete suggestions for the structure of AVID classrooms that are intended to maximize student learning.

The socio-cultural theory of learning asserts that intelligence is defined by society or culture and that individual cognitive gains arise through interactions within actual cultural and social environments and then through later internalization of these experiences. In other words, learning arises out of reflection or internalization of social interaction. This theory implies that students learn best in socio-cultural contexts that:

- facilitate co-operative learning and different models of learning;
- allow students to observe their peers using successful learning models; and
- allow students to exploit their personal strengths and interests (Stage, Muller, Kinzie, & Simmons, 1998).

The second theory, social constructivism, asserts that students construct their knowledge through their experiences with people, places and objects. The theory implies that students are best able to learn when they are:

- given opportunities to collaborate with their peers and instructors; and
- encouraged to negotiate the selection of educational activities that suitably challenge them to go beyond what the student or instructor assumes is possible (Vygotsky, 1978).

Both the socio-cultural theory and social constructivism are evident in the AVID program, since it purports to place the students at the centre of a guided learning process rather than promoting teacher-centred learning. A key characteristic of the AVID program is that a network of AVID-trained teachers and tutors supports students' learning.

The AVID Center itself has drawn attention to how the AVID program changes the socio-cultural environment in which students learn. Swanson (1997) identifies within the AVID program three characteristics proposed by Cummins (1986/2001) as determinants of whether underserved students will be "disabled" or empowered in learning: community participation, students generating their own knowledge and professionals advocating for disadvantaged students. Swanson believes the AVID program demonstrates all of these characteristics by requiring parents to sign up to become partners in their children's education, providing tutor role models, using writing as a tool of learning, the inquiry method and collaboration and through teachers promoting the placement of AVID students in more advanced courses than their assessed abilities might otherwise normally merit.

The AVID program supports could change the socio-cultural environment experienced by high school students who are new to the program. Underlying the program logic is the assumption that middle-achieving students do not attend post-secondary education because they are not normally sufficiently challenged and empowered at the high school level to achieve higher academic results. The implication is that learning environments that stimulate co-operative thinking,

77 Glasser postulates that teachers feel it is their responsibility for the students to learn and that they can feel burdened by this responsibility.

creativity and the exchange of ideas will raise students' expectations of themselves and increase the likelihood of them going on to post-secondary study.

ATTRIBUTION THEORY AND MOTIVATION

As applied in education, attribution theory suggests that a students' perceptions of their educational experiences influence their motivation to succeed, perhaps even more so than the actual objective reality of those experiences (Anderman & Midgley, 1998).

According to the authors, high school students with a history of low to middle achievement might find it hard to increase their drive to try harder. More specifically, those who perceive that their academic performance "is caused by factors out of their control are unlikely to see any reason to hope for an improvement" (p. 2). In contrast, if students were to attribute their performance to a "lack of important skills or to poor study habits, they are more likely to persist in the future." Learning tools and experiences that produce positive outcomes for low- and middle-achieving performers might foster a more positive, internalized attitude toward learning and higher achievement.

According to Keller (1983), four conditions must be met for a student to be motivated to learn: attention, relevance, confidence and satisfaction—known as ARCS. The AVID program places students academically in the middle in advanced courses, offers continuous academic support to help them achieve and provides the opportunity to be challenged in ways that are relevant to their post-secondary future and to succeed in meeting that challenge (Mehan et al., 1996). If so, successful AVID students will have increased chances of being academically prepared for post-secondary education.

SOCIAL CAPITAL THEORY

Bourdieu (1986) defines social capital as "the aggregate of the actual or potential resources which [sic] are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition." Theories of social capital, therefore, might provide a suitable framework within which to consider the ways in which complex social interactions in young people's lives influence their educational experience. Bassani (2003) asserts that adolescents "learn and are socialized by peers, in addition to the adults in the networks to which they belong." More recently, Putnam (2001) has suggested that there is a strong relationship between measures of social capital and educational performance.

Mehan et al. (1996) point out that AVID students are socialized into an ideology that supports working hard, getting good grades and entering the academic world and that the AVID program builds a comprehensive system of social support that reinforces that ideology. The authors state that "if schools, not just well-to-do families, can deploy social capital to form productive social networks, then…schools can become transformative institutions, not just reproductive institutions."

APPENDIX B: AVID Site Certification

Since 1996, the AVID Center has orchestrated an annual certification process to recognize the implementation level of the AVID program that sites have achieved. To use the AVID curriculum, trade name, trademark and logo, each site must agree to annual participation in the online certification process. The process includes both the Initial Self Study (ISS) and the Certification Self Study (CSS), completed in the fall and spring, respectively. Forms are completed by the site's AVID coordinator, in consultation with the site team, and then submitted to the district director responsible for each site. The process is intended to determine each site's conformity with the AVID model and to help identify next steps to improve the implementation level of the AVID program at the site. The CSS form is submitted in April each year.[78]

The certification rating for the school is calculated based on the implementation level of each AVID Essential. For each of the 11 Essentials, the site CSS presents several indicators that describe "important aspects of implementation of that Essential." Each indicator has four levels of implementation described under four headings: Not AVID (Level 0), Meets Certification Standards (Level 1), Routine Use (Level 2) and Institutionalization (Level 3). The district director confirms or amends the implementation level of each indicator assigned by the site's AVID coordinator and the site team. There were 52 such indicators across the 11 Essentials in the 2006–07 certification process. The overall implementation level for each Essential is then calculated from the level reached for each indicator.

An Essential is deemed "Institutionalization," or Level 3, if no more than one indicator is below Level 3 and none is at Level 0. An Essential is deemed "Routine Use," or Level 2, if no more than one indicator is below Level 2 and none is at Level 0. An Essential is deemed "Meets Certification Standards," or Level 1, if no more than one indicator is below Level 1 and a plan has been implemented to bring the Level 0 indicator up to Level 1 or higher for the following school year. An Essential is deemed "Not AVID," or Level 0, if more than one indicator is below Level 1. For example, Essential 8 states: "A sufficient number of tutors must be available in AVID elective class(es) to facilitate student access to rigorous curriculum. Tutors should be students from colleges and universities and they must be trained to implement the methodologies used in AVID."

One of the five indicators for this Essential in the CSS form concerns the student-to-tutor ratio and tutors' educational background. For this indicator, the form describes each implementation level as follows:[79]

- Not AVID (Level 0)—The student-to-tutor ratio in the AVID elective exceeds 7:1.
- Meets Certification Standards (Level 1)—The student-to-tutor ratio in the AVID elective is no higher than 7:1. Whenever possible, college tutors are hired as AVID tutors.

78 The ISS is a requirement for certification in the sense that access to the CSS is conditional on completion of the ISS each year.

79 The CSS suggests possible sources of evidence to use when assessing levels of implementation of indicators for this Essential as: use of AVID tutorial libraries, videos and materials; classroom observations of teachers; tutors and students using Costa's Level of Questions in inquiry process; classroom observations to determine student-to-tutor ratio; tutor training materials like sign-in sheets, notes and certificates upon completion; timesheets (tutor training hours are progressive); tutorial request forms; tutor reflections; and tutor portfolios. For each site, the sources of evidence used should be indicated on the form.

- Routine Use (Level 2)—The student-to-tutor ratio in the AVID elective is no higher than 7:1. At least one of the tutors for each section is a current college student.

- Institutionalization (Level 3)—The student-to-tutor ratio in the AVID elective is no higher than 7:1. At least two of the tutors for each section are current college students; 50 percent of the tutors have worked with AVID for at least two semesters.

A description of the strengths of the site's implementation of each Essential, as well as of the areas for growth and planned next steps, is required on the form. Typically, the site's AVID coordinator completes these text-based entries for each Essential, and the district director adds additional comments before submission to the AVID Center.

The four possible designations awarded in the certification program are as follows:

- Affiliate sites have either completed their first year of AVID implementation or are in a later year and have partially implemented the 11 Essentials (at least one of which is rated at Level 1) and are continuing in their efforts to fully meet the requirements for certification.

- Certified sites have fully implemented the 11 Essentials (i.e. all are rated at Level 1 or higher) and have completed all the necessary data collection documentation.

- Sites certified with distinction have fully implemented the 11 Essentials (i.e. all are rated at Level 2 or higher), and the site met additional achievement benchmarks established annually by the AVID Center.

- Demonstration sites are those judged to have shown exemplary AVID implementation practices (i.e. all Essentials are rated at Level 2 or higher) and to have raised levels of student achievement. Sites must apply specifically for demonstration status, in addition to completing the self-study process. Potential demonstration sites should attend special sessions held at the AVID Summer Institute, host visits by the AVID National Validation Team and, if certified, take a leadership role for other AVID sites.

Across all sites, AVID certification is the principal means by which the AVID Center exercises control over the quality of programs that call themselves AVID. It has considerable strengths in that the exercise generates a biannual flow of data to the AVID Center which it can use to gauge trends in implementation. The self-study process also engages site teams to reflect upon their own implementation and to take active steps to improve implementation. The reliance on self-study results has some drawbacks in terms of comparing certification outcomes between sites in that these outcomes rely on the judgements of individual site team members and district directors with respect to the applicability of indicators, which sources of evidence are relevant and the levels of implementation achieved.

CERTIFICATION IN THE BC AVID PILOT PROJECT

The ongoing AVID certification process, in principle, should shed some light on site team and district director assessments of the level or quality of AVID implementation for project participants. In practice, however, it is too early to draw conclusions from certification about the experiences of AVID students in Grade 9. For instance, because 2005–06 was the first year of program implementation by BC AVID Pilot Project sites, all sites could only be certified as new sites, regardless of their implementation level.

In 2006–07, sites implementing Grade 9 AVID as part of the project were certified as follows:

- Two sites (one random assignment site and one case study site) were new implementation status, which appears to be due to administrative errors.[80]

- Seven sites (all random assignment sites) were affiliate status, due to recording at least one Essential at Level 0.

- Nine sites (six random assignment sites and three case study sites) were certified status.

Based on information from district directors, the Essentials recorded at Level 0 differed between sites. Most commonly, sites had difficulties meeting Essential 9. Indicators here refer to data collection on senior students, use of standardized tests and state-mandated high school exit exams, which are not commonplace in BC schools. That some schools scored zero while others scored one or more could indicate differences in interpretation of the applicability of the indicators to BC schools. Other Essentials at Level 0 included Essential 4, Essential 8 (due to a shortfall of tutors) and Essential 11 (due to the site team not meeting regularly). Again, it is hard to know how far the distinction between affiliate and certified sites reflects differences in implementation or in interpretations of the implementation.

AVID certification outcomes later in the project—particularly when assessed in conjunction with earlier outcomes on the same indicators derived from earlier data collection for the site—could provide more practical insights on stages of implementation reached by each site. Still, because sites are likely to enrol non-AVID participants in younger cohorts also covered by the certification process, it will be difficult to draw firm conclusions on the experiences of the research cohorts alone solely from the certification process.

80 For at least one of these sites, the district director had found the site to be meeting requirements for certified status, but newly implemented status was recorded in the AVID data system.

APPENDIX C: AVID student selection criteria

The AVID Center has long recognized the importance of student selection to the success of the program. AVID Essential 1 states, "AVID student selection must focus on students academically in the middle with academic potential who would benefit from AVID support to improve their academic record and begin college preparation." The Center's materials identify several proxy indicators for the kinds of students upon whom the program is expected to have an impact. These materials formed the logical starting point for identifying the project selection criteria.

The Teacher/Coordinator Guide (Swanson et al., 2004; hereafter "the Guide") has 12 pages describing processes related to student recruitment and states, "One of the keys to the success of an AVID program lies in choosing the right students to participate." The Guide includes both specific and non-specific references to many proxy indicators that might identify these "right students." Among the more specific recommendations is the instruction to "[u]se the following criteria to choose potential AVID candidates:

1. Use the list of students qualifying for the free or reduced lunch program to identify low-income students.
2. Look for students whose stanine [standard nine-point scale] scores in language are average (or low, as in the case of some second-language students) and whose stanine scores in math are average or above, indicating academic potential.
3. Consider students who have a GPA between 2.0 and 3.5.[81]
4. Identify students who may be the first in their family to attend college.
5. Consider students who face special circumstances that may be obstacles to achievement.
6. Look for students of an ethnicity traditionally under-represented in four-year colleges."[82]

Although educators are trained in using the Guide at the AVID Summer Institute,[83] there is no formal instruction about how exactly to weigh the above criteria against one another. Those reading the criteria could ask questions like "Should students meet all the criteria or just one or two?", "What differentiates 'high' from 'low' stanine scores?" and "What special circumstances count as 'obstacles to achievement'?" The Guide includes an AVID student profile that identifies four academic characteristics that should apply to an AVID student, as well as four other criteria, at least one of which should apply to the student. This AVID student profile is shown in the left column of Text Box C.1. The BC AVID Pilot Project's Profile, also based on AVID Center materials, appears in the right column (see Chapter 4 as well).

Perhaps necessarily, the range of selection criteria in the Guide that must be covered and how they should be applied are relatively vague. The AVID student profile does not present standard definitions for each criterion. The AVID Summer Institute's training includes instruction to teachers that these can be defined at the school level. The training also makes clear that no criterion is set in stone, since some students can be recruited from the academic high end rather than the middle GPA range.

In the Guide, the forms accompanying the student profile reproduced in Text Box C.1 also include several other indicators that can be taken into account during selection. For example, the AVID recruitment form includes reference to an attendance record, discipline referrals, two measures of GPA, a teacher recommendation, an interview and remarks. The Guide includes a sample form to be circulated to other teachers in the school to recommend potential AVID candidates. The form includes criteria not in the AVID student profile that potential candidates should fit, such as "The student has good attendance" and "The student has appropriate classroom behaviour" (p. 19). Furthermore, the recruitment timeline includes other instructions to lead selectors' scrutiny of Grade 8 student records, such as "Remember to also double-check a student's attendance and behaviour records" (p. 15). The instruction is not clear on what bearing this check should have on a student's chances of selection. Understandably, recording systems vary by school, but expectations could also vary by school or even by teacher.

In the Guide, there is a three-paragraph description of the student interview, a very important stage of recruitment. The Guide states:

> *The interview is the critical step in choosing students… The interview almost always guarantees success in placement… Academic potential, or a lack thereof, seems to be obvious when talking with students. Following the interview, indicate whether the student is definitely appropriate for the program, probably appropriate, or inappropriate. (p. 16)*

While the basis for such a decision is not made clear, there are some clear instructions, such as the following: "Screen out those who suggest that they are not interested in working hard. Do take students who say: 'I'm not very good in English or math, but I would like to improve my skills.'"

81 According to the BC Ministry of Education's Policy Document on Student Credentials (retrieved March 26, 2008, from www.bced.gov.bc.ca/policy/policies/student_credentials.htm), this is measured on a four-point scale where 4.0 typically represents an A average, 3.0 a B average and 2.0 a C average. Correspondingly, an average can be calculated for any given set of grades using the following conversion: A=4, B=3, C+=2.5, C=2, C-=1.

82 Swanson et al. (2004).

83 The SRDC observed training at the AVID Summer Institute in San Diego in 2004–06.

Text Box C.1: The AVID Student Profiles

AVID Center Profile	BC AVID Pilot Project Profile
Students with academic potential: ▮ Average to high test scores ▮ 2.0 to 3.5 GPA in non-college-preparatory curriculum ▮ College potential with support ▮ Desire and determination	Has academic potential: ▮ Can succeed in rigorous courses with support ▮ Desire and determination to be successful at school ▮ C to B Average (2.0 to 3.5 GPA) ▮ Average to high standardized test scores ▮ Appropriate classroom behaviour ▮ Good attendance ▮ Satisfactory work habits ▮ Does not receive additional academic support like Learning Assistance or a modified program ▮ College/university aspirations
Meet one or more of the following: ▮ First to attend college ▮ Historically underserved in four-year colleges ▮ Low income ▮ Special circumstances	May have one or more of the following: ▮ First in family to attend college ▮ Member of under-represented minority in post-secondary education ▮ Low income ▮ Single-parent/large family ▮ Other special circumstances

Source: Swanson et al. (2004); BC AVID Pilot Project Operations Manual.

The ASC considered the challenges that student selection would present for a research project trying to give AVID a fair test during its initial years of implementation in BC. They are as follows:

- For a group of educators faced with making an eligibility decision about each student applying for the AVID program, the Center materials and training reviewed above provide a mix of specific and non-specific criteria but no prescribed weighting between the criteria. Any one group selecting students could interpret and apply these criteria differently from any other group, resulting in different students being selected for the AVID program, depending on the educators involved.

- Experience from the Chilliwack School District (see Chapter 2) suggested that adjustments to selection criteria were necessary for bringing the program to BC. The necessity stemmed from the different educational context in which BC students were being selected, compared to the U.S. context for which the AVID Center's criteria had originally been devised. For example, there are very few free or reduced lunch programs in BC to provide educators with indicators of the low-income status of students' families.

Flexible and variable U.S.-based criteria could translate into very different participants in the research project at each site and between recruitment years. To draw conclusions from the project that would be meaningful above the level of each year at each site and preferably applicable across BC, the selection process for the project would need careful delineation and implementation. That is, the process of selection for the project would need to be adapted for BC and standardized across sites as far as possible. The committee similarly established that the many different school-based teams doing the selection would need adequate support. If selection went awry, the project purpose—determining the impact of the AVID program for eligible students—could be jeopardized in several ways.

The project selection committee accordingly took steps to standardize the recruitment and selection processes for the BC AVID Pilot Project, as described in Chapter 4.

APPENDIX D: Project Non-Volunteers

LESSONS FOR FUTURE RECRUITMENT

Chapter 5 considers the characteristics of those who had applied for the project and who were selected as AVID-eligible. Across the participating schools, there were many more students who did not apply for the AVID program than students who did, and this proportion appeared to grow from Cohort 1 recruitment to Cohort 2. For example, less than 60 percent of recommended students applied in eight out of 13 schools in Cohort 2. There were concerns that students who were potentially eligible and sometimes recommended for the AVID program by their teachers were not applying because they misunderstood the program or project.

If recommended students did not apply for the AVID program because of lack of knowledge or poor recruitment procedures, then there is scope for recruitment information and procedures to be improved to increase enrolment. On the other hand, if students were unwilling to make a commitment to multiple years of the AVID program or found it unappealing, then other changes might be needed to attract additional students. These changes could be either to the way the program is promoted or, more substantively, to the length and content of the AVID program. Finally, an additional concern is that increased promotion of enrolment might induce applications from non-targeted students—those who are unmotivated or are outside the target group of middle-achieving students.

To find out why students did not apply for the AVID program, about 379 students who were recommended by their teachers as part of Cohort 2 at 11 random assignment sites but who did not go on to apply were asked by SRDC to complete an online survey in June 2006. A little over one-third (142 students) responded. This response rate is high enough to give a broad overview of non-applicants, provided caution is used in interpreting the precise values of the responses.

From the responses, it appears that AVID recruitment efforts of schools had achieved a basic level of awareness, as only 8 percent of respondents said they had not heard anything about the AVID program before the survey. Some 37 percent of respondents, however, did not know that they had been recommended for the AVID program. Even allowing a few months to have elapsed between the recommendation process and the survey, this proportion appears high and suggests that AVID teams should take care to ensure that teacher recommendations are communicated directly to the appropriate students and their parents.

Respondents who had heard of the AVID program most frequently indicated (30 percent) that their desire to take other electives was the most important reason that they did not apply for it. A similar proportion cited the desire to take other electives as an "other reason" they did not apply (see Table D.1). This is an important reminder that the AVID elective must compete with other electives offered to students.

The next largest group of respondents (22 percent) said their "most important" reason for not applying was that they did not need the AVID elective to get good grades. Again, a similar proportion cited not needing the program as an "other reason." These two reasons could reflect well-informed decisions by students who either do not want to miss multiple electives or who are genuine high achievers and see little to be gained from the program. If this is the case, then attracting these students could require substantial changes to the time commitment, scheduling or content of the AVID elective.[84]

These concerns, however, could partially reflect negative comments about the AVID program that surfaced primarily, but not exclusively, in "other reasons." Some 21 percent of respondents who had heard of the AVID program said that they did not apply because it was too much work—as either the "most important" or an "other" reason. One-quarter said they did not apply because the AVID program sounded boring, while 18 percent cited the fact that their friends did not apply. Another 11 percent said that they did not apply because AVID students told them that they did not like the elective. While relatively small, this reason could prove an impediment to Cohort 2 and later recruitment if many current or previous AVID students become vocally dissatisfied with the program.

Some 18 percent of respondents said they did not have enough information to apply, suggesting that more information or broader publicity could be effective for some. Finally, some said that it was too much hassle to apply or did not like the fact that they might not be accepted. Streamlined or assured admission could increase enrolment at the risk of attracting only less motivated students.

Of those who had heard of the AVID program, 27 percent said they did not think about applying. In addition, 61 percent of those who recalled the AVID program said there was nothing that their school or SRDC could have done to make them apply. The remaining 39 percent are the students most likely to be amenable to additional recruitment efforts. One in ten of those who recalled the AVID program said that more information might have encouraged them to apply, 5 percent suggested more fun activities and 3 percent suggested eliminating scheduling conflicts.

84 Students could be overestimating their current achievement or teachers could be inappropriately recommending students who are already achieving high grades.

Table D.1: Reasons for Not Applying among Students Who Recalled the AVID Program

	Most important reason	Other reason	Total
Wanted other electives or timetable problems			
I wanted to take a different elective, not AVID.	30.5	31.2	61.7
I could not fit AVID into my timetable.	–	19.5	19.5
Too much work / boring / disliked by students			
AVID is too much work.	8.6	12.5	21.1
AVID sounded boring.	–	24.2	24.2
AVID students told me they did not like it.	–	10.2	10.2
AVID is not for me			
I do not need AVID to get good marks.	21.9	20.3	42.2
AVID is not for people like me.	3.9	12.5	16.4
My friends are not taking AVID.	–	14.8	14.8
Information and application procedures			
I did not know enough about AVID to apply.	5.5	12.5	18.0
It was too much hassle to apply for AVID.	3.9	11.7	15.6
I heard only some students who apply are selected.	–	15.6	15.6
Other			
Moving / changing schools	7.0	–	7.0
Sample size	**128**	**130**	**258**

Source: BC AVID Pilot Project non-applicant survey.
Notes: Some smaller response categories are omitted.
Multiple answers were permitted for "Other Reasons," although these responses were not included in the percentage counts if they were the same as the "Most Important Reason."
Rounding may cause slight discrepancies in the calculation of sums.
– Results are based on sample sizes that are too small for publication (less than five people) or that may reveal small sample sizes by subtraction.

In conclusion, recommendation and selection procedures could be improved by ensuring that teachers only recommend students who are part of the targeted group—students academically in the middle rather than current high achievers. Administrative procedures could be improved to ensure that students are informed that they have been recommended. A limited number of students said that more information about the AVID program might have convinced them to apply, but many disagreed. A better publicity and information campaign might also convince some students to consider at least taking the AVID elective. In addition, current AVID students could be used more extensively to recruit new students, provided the AVID elective is well run and its value is understood by those students. A substantial number of dissatisfied current and former AVID students, should they materialize, could eventually prove a major impediment to recruitment.

Some students said they did not apply, at least in part, because the AVID program sounded boring, had too much homework and the application procedure was a hassle. These students might be attracted by streamlined recruitment and more fun activities described in the literature used for recruitment and in the curriculum, although these changes might attract unmotivated students and deprive motivated students of valuable, challenging material. Other students said they did not need the AVID program to get good grades. Future impact results on subgroups of participants could demonstrate whether this judgement is true. Finally, if students are taken at their word, the biggest deterrent to enrolment is that other electives must be given up to experience the AVID program over four years. It will be interesting to see whether this factor looms large as a reason why those who did apply for the AVID program and became program group members leave the class in later years (see Chapter 7).

REFERENCES

Anderman, L.H., and Midgley, C. (1998). *Motivation and Middle School Students* (ED421281). Champaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education (eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/15/9f/3b.pdf)

AVID Center (2007). *New to AVID?* (www.AVIDonline.org).

Bassani, C. (2003). "Social Capital Theory in the Context of Japanese Children." *Electronic Journal of Contemporary Japanese Studies* (www.japanesestudies.org.uk/articles/Bassani.html)

Berger, J., Motte, A., and Parkin, A. (2007). *The Price of Knowledge: Access and Student Finance in Canada* (3rd ed.). Montreal: Canada Millennium Scholarship Foundation.

Board on Children, Youth, and Families (2003). *Engaging Schools: Fostering High School Students' Motivation to Learn.* Washington, DC: National Academies Press (books.nap.edu/openbook.php?record_id=10421&page=R1).

Bourdieu, P. (1986). "The Forms of Capital." In J.G. Richardson (Ed.), *Handbook for Theory and Research for the Sociology of Education.* Westport, CT: Greenwood Publishing Group, Inc.

Bowlby, J.W., and McMullen, K. (2002). *At a Crossroads: First Results for the 18- to 20-year-old Cohort of the Youth in Transition Survey.* Ottawa: Human Resources Development Canada and Statistics Canada.

Brophy, J.E. (2004). *Motivating Students to Learn* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates (books.google.com/books?hl=en&lr=&id=gD7_VSNmu7cC&oi=fnd&pg=PR11&dq=Brophy,+J.+E.+(2004).+Motivating+students+to+learn+(2nd+Ed.).+Lawrence+Erlbaum+Associates,+Inc.&ots=nTXnMiByKV&sig=MBw7ZfrnEYaW-bxiNkvyyO2yfKc).

Burtless, G. (1995). "The Case for Randomized Field Trials in Economic and Policy Research." *Journal of Economic Perspectives* 9(2): 63-84.

Carbonara, W. (2005). "Tracking, Students' Effort, and Academic Achievement." *Sociology of Education* 78: 27-49.

Card, D. (2001). "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems." *Econometrica* 69(5): 1127-60.

Cook, T. (2003). "Why Have Educational Evaluators Chosen Not to Do Randomized Experiments?" *American Academy of Political and Social Science* 589: 114-49.

Copeland, M. (2005). *Socratic Circles: Fostering Critical and Creative Thinking in Middle and High School.* Portland, ME: Stenhouse Publishers.

Cummins, J. (1986; reprinted 2001). "Empowering Minority Students: A Framework for Intervention. *Harvard Educational Review* 71(4): 656-75.

Eccles, J.S, Vida, M.N., and Barber, B. (2004). "The Relation of Early Adolescents' College Plans and Both Academic Ability and Task–Value Beliefs to Subsequent College Enrolment." *The Journal of Early Adolescence* 24(1): 63-77.

Fashola, O.S., and Slavin, R.E. (1997). *Effective Dropout Prevention and College Attendance Programs for Latino Students.* Washington, DC: Office of Educational Research and Improvement.

Freedman, J. (1998). *Wall of Fame: One Teacher, One Class, and the Power to Save Schools and Transform Lives.* San Diego: AVID Academic Press.

Gandara, P., Larson, K., Mehan, H., and Rumberger, R. (1998). *Capturing Latino Students in the Academic Pipeline.* Berkeley: University of California, Center for Latino Policy Research.

Glasser, W. (1986). *Control Theory in the Classroom.* New York: Harper & Row. (Updated in 1998 as: *Choice Theory in the Classroom.* New York: Harper Collins Publishers.)

Gueron, J. (2000). *The Politics of Random Assignment: Implementing Studies and Impacting Policy.* New York: MDRC.

Guthrie, L.F., and Guthrie, G.P. (2002). *The Magnificent Eight: AVID Best Practices Study— The Final Report.* Burlingame, CA: Center for Research, Evaluation and Training in Education (CREATE).

Hao, L., and Bonstead-Bruns, M. (July 1998). "Parent–Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students." *Sociology of Education* 71(3): 175-98.

Hidi, S., and Harackiewicz, J.M. (2000). "Motivating the Academically Unmotivated: A Critical Issue for the 21st Century." *Review of Educational Research* 70(2): 151-79.

Ipsos-Reid Corporation. (April 2001). *Post-Secondary Accessibility Study.* Prepared for Alberta Learning (www.advancededucation.gov.ab.ca/news/2001/May/Summary_Report.pdf).

James, D.W., Jurich, S., and Estes, S. (2001). *Raising Minority Achievement: A Compendium of Education Programs and Practices*. Washington, DC: American Youth Policy Forum (www.aypf.org/publications/rmaa/pdfs/AVID.pdf).

Keller, J.M. (1983). "Motivation in Instructional Design." In C.M. Reigeluth (Ed.), *Instructional Design Theories and Models: An Overview of Their Current Status*. Hillsdale, NJ: Erlbaum (www.ericdigests.org/1998-1/motivation.htm).

Lambert, M., Zeman, K., Allen, M., and Bussière, P. (2004). *Who Pursues Post-Secondary Education, Who Leaves and Why: Results from the Youth in Transition Survey.* Ottawa: Statistics Canada and Human Resources and Skills Development Canada.

Lapan, R.T., Kardash, C.M., and Turner, S. (2002). "Empowering Students to Become Self-Regulated Learners." *Professional School Counseling* 5(4): 257-65.

Lee, P.W. (1999). "In Their Own Voices: An Ethnographic Study of Low-Achieving Students within the Context of School Reform." *Urban Education* 34(2): 214-44.

Marzano, R.J. (2003). *What Works in Schools: Translating Research into Action.* Alexandria, VA: Association for Supervision and Curriculum Development (books.google.com/books?hl=en&lr=&id= MVyhsp10SIgC&oi=fnd&pg=PA1&ots=HpF-zlI1P1&sig=vfzNucXBVw76LvFuqUiaU-D6Ajc#PPA1,M1).

McInerney, D.M., Dowson, M., and Yeung, A.S. (2005). "Facilitating Conditions for School Motivation: Construct Validity and Applicability. *Educational and Psychological Measurement* 65(6): 1046–66.

Mehan, H., Villanueva, I., Hubbard, L., and Lintz, A. (1996). Constructing School Success: *The Consequences of Untracking Low-Achieving Students*. New York: Cambridge University Press.

Miller, S.R. (2000). *Falling Off Track: How Teacher-Student Relationships Predict Early High School Failure Rates*. Chicago: Consortium on Chicago School Research.

Mohr, L.B. (1995). *Impact Analysis for Program Evaluation* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Montecel, M.R., Cortez, J.D., and Cortez, A. (2004). "Dropout-Prevention Programs: Right Intent, Wrong Focus, and Some Suggestions on Where to Go from Here." *Education and Urban Society* 36(2): 169-88.

Oakes, J., Selvin, M., Karoly, L., and Guiton, G. (1992). *Educational Matchmaking: Academic and Vocational Tracking in Comprehensive High Schools*. Berkeley: University of California, National Center for Research in Vocational Education.

Organization for Economic Co-operation and Development (2006). *Education at a Glance, 2006*. Paris: OECD.

Orr, L. (1999). *Social Experiments: Evaluating Public Programs with Experimental Methods*. Thousand Oaks, CA: Sage Publications.

Otis, N., Grouzet, F.M.E., and Pelletier, L.G. (2005). "Latent Motivational Change in an Academic Setting: A Three-Year Longitudinal Study." *Journal of Educational Psychology* 97(2): 170-183.

Peterson, J.S., and Colangelo, N. (1996). "Gifted Achievers and Underachievers: A Comparison of Patterns Found in School Files." *Journal of Counseling & Development* 74(4): 399-407.

Putnam, R. (2001). "Social Capital Measurement and Consequences." *Isuma* 2(1): 41-51.

R.A. Malatest & Associates Ltd. (2007). *The Class of 2003 High School Follow-Up Survey.* Montreal: Canada Millennium Scholarship Foundation.

Reeve, J., and Yang, H. (2006). "'What Teachers Say and Do to Support Students' Autonomy During a Learning Activity." *Journal of Educational Psychology* 98(1): 209-18.

Robinson, L. (2006). "'I know I'd do better if …': Combating Achievement Barriers for Adolescent Underachieving Learners." *Journal of Cognitive Affective Learning* 2(2), 27-32.

Shaienks, D., and Gluszynski, T. (2007). *Participation in Post-Secondary Education: Graduates, Continuers and Drop Outs—Results from YITS Cycle 4* (81-595-MIE2007059). Ottawa: Statistics Canada.

Sheets, R.H. (2006). "Ethnic Identity and Its Relationship with School Achievement." *Multicultural Education* 13: 58-60 (findarticles.com/p/articles/mi_qa3935/is_200604/ai_n17173669).

Slavin, R.E., and Fashola, O.S. (1998). *Show Me the Evidence!: Proven and Promising Programs for America's Schools*. Thousand Oaks, CA: Corwin Press, Inc.

Social Research and Demonstration Corporation (2007). *Future to Discover Pilot Project: Early Implementation Report*. Montreal: Canada Millennium Scholarship Foundation.

Stage, F.K., Muller, P.A., Kinzie, J., and Simmons, A. (1998). *Creating Learning-Centered Classrooms: What Does Learning Theory Have to Say?* Washington, DC: ERIC Clearinghouse on Elementary and Early Childhood Education (www.ericdigests.org/1999-2/theory.htm).

Statistics Canada (2005). *Youth in Transition Survey 2000 (YITS) Reading Cohort Cycle 1 User Guide*. Revised September 2005 (www.statcan.ca/english/sdds/documents/4435_D25_T1_V1_E.pdf).

Statistics Canada (2007a). " Number of Children at Home (8) and Census Family Structure (7) for the Census Families in Private Households of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2001 and 2006 Censuses—20 Percent Sample Data" (catalogue no. 97-553-XCB2006007). Ottawa: Statistics Canada.

Statistics Canada (2007b). "Household Type (11) and Household Size (9) for Private Households of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 2006 Census—20 Percent Sample Data" (catalogue no. 97-554-XCB2006011). Ottawa: Statistics Canada (http://www12.statcan.ca/english/census06/data/topics/Print.cfm?PID=89044&GID=838062&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0).

Swanson, M.C. (1997). *Evidence of the Need for AVID* (www.avidonline.org/info/ID=96&criteria=%22evidence+of+the+need+for%22).

Swanson, M.C., Contreras, M., Cota, D., and Gira, R. (2004). *Implementing and Managing the High School AVID Program: The AVID Teacher/Coordinator Guide*. San Diego: AVID Academic Press.

Thiessen, V. (2007). *Academic Performance, Human Capital Skill Formation, and Post-Secondary Education: A Comparison of First Nation, Immigrant, Visible Minority, and Other Native-Born Canadian Youth* (Working Paper No. 1). Vancouver: Canadian Labour Market and Skills Researcher Network.

Voelkl, K.E. (1995). "School Warmth, Student Participation and Achievement." *Journal of Experimental Education* 63: 127-38.

Voelkl, K.E. (1997). "Identification with School." *American Journal of Education* 105: 294-317.

Vygotsky, L.S. (1978). *Mind in Society: The Development of Higher Psychological Process*. Cambridge: Harvard University Press.

Watt, K., Yanez, D., and Cossio, G. (2002). "AVID: A Comprehensive School Reform Model for Texas." *National Forum of Educational Administration and Supervision Journal* 19(3) (www.avidonline.org/content/pdf/359.pdf).

Watt, K., Powell, C.A., and Mendiola, I.D. (2004). "Implications of One Comprehensive School Reform Model for Secondary School Students Underrepresented in Higher Education." *Journal of Education for Students Placed at Risk* 9(2): 241-59.

Wells, G. (1997) "Dialogic Inquiry in Education: Building on Vygotsky's Legacy." In C.D. Lee and P. Smagorinsky (Eds.), *Vygotskian Perspectives on Literacy Research*. Cambridge: Cambridge University Press (books.google.com/books?hl=en&lr=&id=V6r5IUHSJiwC&oi=fnd&pg=PA51&dq=dialogic+inquiry+in+education:+Building+on+Vygotsky%27s+legacy.&ots=vsILO9X7lb&sig=ZunOjKHBL4PxqCs_AECrKv4eN7A).

Witko, K., Bernes, K.B., Magnusson, K., and Bardick, A.D. (2005). "Senior High School Career Planning: What Students Want." *Journal of Educational Enquiry* 6(1): 34-49.

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