



**2003 Canadian Survey of
High School Seniors Participating in the
International Baccalaureate Program**

Abstract

In 2002, the International Baccalaureate North America (IBNA) conducted a student survey of 5,412 high school seniors in the United States. In 2003, this survey was replicated in the United States, and a modified version of the survey was also administered in Canada. One thousand three hundred eighty seniors from high schools in Canada responded. This report provides an analysis of the results obtained from the Canadian responses.

2003 Canadian Survey of High School Seniors Participating in the International Baccalaureate Diploma Program

The International Baccalaureate (IB) Diploma Program (DP) is a comprehensive, rigorous, international curriculum, community service and examination structure. It was designed to provide internationally mobile students with a common curriculum that would serve as a postsecondary admission credential. It has grown to become a rigorous curriculum that encourages cultural understanding, community involvement and analytical thinking among diverse student populations. “The intrinsic value of the programme combined with the multi-national flavour of its subject syllabuses and examinations and international recognition is by far the principal reason for its growing popularity in Canada and the United States” (Nicol 1982).

Each year, thousands of Canadian high schools seniors obtain an IB Diploma. A few attempt the Diploma, but do not receive it, usually due to insufficient credits. Others obtain certificates from participation in certain IB classes and exams but do not participate in the full Diploma Program. Most participants in the IB DP, whether Diploma or Certificate candidates, advance to a university or college.

Many believe that IB participation aids students in receiving acceptance to universities and colleges. “The IB program is widely viewed by college admissions officers as a plus on a college application” (Ortiz 2003). However, little research has been performed to determine where students are applying and the rate at which they are admitted. In 2003, IBNA administered the 2003 IBNA Voluntary Data Form for Canadian Schools. This form was designed and administered with the purpose of

gaining a more thorough understanding of the college application and admission characteristics of IB seniors in Canada.

Method

Participants

One thousand three hundred eighty graduating high school seniors (1,342 males, 747 females, 38 refused to answer) from 32 Canadian high schools responded. Both Diploma and Certificate candidates submitted responses (652 Certificate, 728 Diploma). An IB teacher or coordinator administered surveys to students either in class or immediately after sitting for an exam. All students were informed that their participation in the survey was voluntary.

Materials

The survey consisted of two pages. The first page contained a brief identification section in which students were asked to indicate their date of birth, gender and IB candidate number, assigned to all students that participate in the IB DP. In addition, students were asked to record their highest Math, Verbal and Combined SAT score if they sat for the Scholastic Assessment Test (SAT). Next, they were provided with a chart that listed the Canadian Universities and one option of Other. For each university applied to, students were asked to indicate the faculty applied to at each school (Arts, Science or Other). In addition, they were asked to indicate if they had been granted admission, early admission, conditional acceptance and/or unconditional acceptance. This chart continued to the second page. At the end of the second page, students were asked to indicate which university they planned to attend.

Procedure

Each IB program must identify an individual that will serve as the IB program coordinator. Required coordinator contact information, such as the mailing address, email address, telephone number and fax number, is maintained by IBNA in a frequently updated Microsoft Access database. Each IB coordinator's email address was collected from this database. In April 2003, emails were sent to all IB DP coordinators from schools in Canada with high school seniors that had participated in the DP. These emails contained a memorandum explaining the purpose of the survey, how and to whom the survey was to be administered, when and where it was to be returned and the actual survey.

IB DP coordinators were asked to print, make copies of and administer, or have an IB teacher administer, the survey during the May 2003 examination session to graduating seniors that had participated in the DP. Coordinators were specifically instructed to administer the survey to both Diploma and Certificate candidates. Next, coordinators were asked to print the predicted and actual IB exam scores for each student at their school to participate in the survey. This information is available through an online database that is easily accessible by the IB DP coordinator at each school.

Error Structure

One thousand three hundred eighty candidates responded. Seven hundred twenty eight of the 1,778 Diploma candidates responded. This indicates a response rate of 41%. Data on the grade level of Certificate candidates is not maintained and, therefore, an exact analysis of graduating Certificate candidate response rates is not possible. However, it is assumed that the response rates of Diploma and Certificate candidates are similar. There are many possible reasons for this fairly low response

rate. Although all IB DP coordinators at schools with graduating seniors who had participated in the IB DP were emailed the memorandum and survey, it is possible that many did not print, make copies of and administer the survey. These actions require time and resources (paper, ink, etc.) that many IB coordinators and teachers may have not been able to provide. In addition, coordinators were asked to return completed surveys by mail. Canadian schools were asked to mail their surveys to the IBNA offices in Canada, but although minimal, many schools may not have had the funds to allow the forms to be mailed. In addition, participation in the survey was completely voluntary, so it is possible that the external validity of the study was affected by volunteer bias.

Although we recognize the possible presence of volunteer bias and non-response error in this survey, we believe our sample is sufficiently representative of the Canadian IB population. Schools from every province responded. Eight of the schools to respond were private institutions, and the remaining 24 schools were public. The proportion of males and females to respond (44.3% male, 55.7% female) was similar to the eligible population (45.3% male, 54.7% female). These sample characteristics seem to indicate that respondents were similar to the eligible population.

A sufficient number of candidates responded to all questions except those asking about Scholastic Assessment Test (SAT) scores and conditional or unconditional acceptance to a postsecondary institution. One hundred thirty one respondents indicated that they had taken the SAT and provided their scores. This is an insufficient sample size to assume representation of the total eligible population, so only a description of the sample answers will be provided for SAT score responses. In addition, 250 respondents indicated whether they had received conditional or

unconditional acceptance to a postsecondary institution. This is also an insufficient sample size to assume accurate representation of the total population.

Lastly, many schools have instituted criteria for admission into the IB DP at their school. Test scores, grade point averages and teacher recommendations are just a few of the possible factors considered for admission into some IB programs. This indicates that students are admitted into the program because they are intelligent and highly motivated. Individuals should take this into account when comparing IB students to the overall population.

Results

Data coding, entry and basic analyses were performed by a market research company, Shugoll Research, in Washington DC. Data on total populations of candidates was obtained through an online Oracle Discoverer database that is maintained by the International Baccalaureate Organization (IBO) in Cardiff, Wales.

An overwhelming majority of respondents (96.4%) indicated that they had applied for university admission, and most respondents (93.8%) indicated that they had been accepted. The University of British Columbia and the University of Alberta received the highest proportions of applications from respondents overall (Figure 1). The largest proportions of respondents attended high schools in British Columbia (22.0%) and Alberta (29.3%), so the high number of respondent applications to universities in British Columbia and Alberta is not unusual. The Faculty of Arts at the University of British Columbia and the University of Toronto received the highest proportions of applications from respondents applying to a Faculty of Arts (Figure 2). The Faculty of Sciences at the University of Alberta and the University of British Columbia received the highest

proportions of applications from respondents applying to a Faculty of Sciences (Figure 3). The University of Calgary and Queen's University received the highest proportions of applications from respondents that applied to a Faculty other than Arts or Sciences (Figure 4).

More respondents applied to Faculties of Sciences ($N = 545$) than to Faculties of Arts ($N = 435$) or Faculties other than Arts or Sciences ($N = 370$) (Figure 5). The highest proportion of applications from Diploma candidates went to Faculties of Sciences (43.5%). Faculties of Arts received 29.1% of Diploma applications to a Faculty, and Faculties other than Arts or Sciences received 27.4% of Diploma candidate applications. An equal proportion of applications from Certificates candidates were to Faculties of Arts (36.2%) and Faculties of Sciences (36.4%) (Figure 6).

One hundred thirty one respondents indicated that they had taken the SAT. Most respondents to take the SAT were Diploma candidates (83.2%). The overall respondents' mean score on the SAT was 1319. Diploma candidates scored an average of 1332, and Certificate candidates scored an average of 1259. On the SAT Math section, Diploma candidates scored an average of 688 points, and Certificate candidates scored an average of 636 points. On the SAT Verbal section, Diploma candidates scored an average of 649 points, and Certificate candidates scored an average of 626 points. These scores are much higher than the average Math ($M = 519$) and Verbal ($M = 507$) scores obtained by the total SAT test-taking population (Figure 7). Although an insufficient sample size prevents generalization to the total population, the difference between SAT scores of Certificate and Diploma candidates may be

significant. In addition, the SAT scores of Canadian IB candidates may be significantly higher than scores of the total test-taking population.

Discussion

Most Canadian IB candidates applied and received acceptance to a university. The University of British Columbia and the University of Alberta received the highest number of IB applications. Faculties of Science received the most applications from IB candidates. Diploma candidates applied to Faculties of Arts more frequently than to Faculties of Sciences. Certificate candidates applied to Faculties of Arts and Faculties of Sciences with the same frequency, and both Diploma and Certificate candidates applied to Faculties other than Arts or Sciences the least frequently. Measurement and analysis of candidate reasons for and opinions of applying to either a faculty of arts or faculty of sciences school may prove interesting.

The average scores of respondents on the Scholastic Assessment Test (SAT) were much higher than average scores of the total population. In addition, the scores of Diploma respondents were higher than scores of Certificate respondents. An insufficient sample size prevents performance of sufficiently accurate statistical analyses of differences between populations. Future research is needed to determine success of Canadian IB Diploma and Certificate candidates on the SAT. Unfortunately, there is no equivalent test to the SAT required for entry into Canadian Universities.

Works Cited

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Figure 1
Respondents' Most Applied to Universities and Colleges

University or College	Number of IB Applicants	% Total Respondents Applying to University
University of British Columbia	301	22.6%
University of Alberta	290	21.8%
McGill University	282	21.2%
Queen's University	271	20.4%
University of Toronto	257	19.3%
University of Western	169	12.7%
Dalhousie University	154	11.6%
Simon Fraser University	144	10.8%
University of Calgary	137	10.3%
McMaster University	124	9.3%
University of Waterloo	94	7.1%
University of Ottawa	94	7.1%
Carleton University	81	6.1%
University of Victoria	75	5.6%
University of Manitoba	74	5.6%
University of Guelph	68	5.1%
York University	67	5.0%
Trent University	65	4.9%
University of Montreal	64	4.8%
Acadia University	57	4.3%

Figure 2
Respondents' Most Applied to Faculty of Arts

University or College	Number of IB Applicants	% Total Respondents Applying to Faculty of Arts
University of British Columbia	88	20.2%
University of Toronto	85	19.5%
McGill University	83	19.1%
Queen's University	82	18.9%
University of Alberta	67	15.4%
University of Western	55	12.6%
Dalhousie University	54	12.4%
Simon Fraser University	50	11.5%
Carleton University	36	8.3%
Trent University	34	7.8%
York University	34	7.8%
University of Ottawa	32	7.4%
Mount Allison University	29	6.7%
McMaster University	28	6.4%
University of Victoria	27	6.2%
University of Guelph	22	5.1%
University of Calgary	21	4.8%
University of New	17	3.9%
Acadia University	17	3.9%
Concordia University	16	3.7%

Figure 3
Respondents' Most Applied to Faculty of Sciences

University or College	Number of IB Applicants	% Total Respondents Applying to Faculty of Sciences
University of Alberta	151	27.7%
University of British Columbia	114	20.9%
University of Toronto	102	18.7%
McGill University	98	18.0%
Queen's University	97	17.8%
Dalhousie University	66	12.1%
University of Western	65	11.9%
McMaster University	57	10.5%
University of Calgary	48	8.8%
Simon Fraser University	43	7.9%
University of Ottawa	37	6.8%
University of Waterloo	33	6.1%
University of Guelph	29	5.3%
Acadia University	26	4.8%
Carleton University	21	3.9%
Trent University	20	3.7%
University of Victoria	20	3.7%
University of New	19	3.5%
University of Montreal	18	3.3%
University of Manitoba	17	3.1%

Figure 4
Respondents' Most Applied to Faculty - Other

University or College	Number of IB Applicants	% Total Respondents Applying to Faculty - Other
University of Calgary	57	15.4%
Queen's University	56	15.1%
University of British Columbia	53	14.3%
McGill University	49	13.2%
University of Alberta	47	12.7%
University of Toronto	44	11.9%
University of Waterloo	36	9.7%
University of Western	31	8.4%
Simon Fraser University	30	8.1%
McMaster University	26	7.0%
University of Montreal	22	5.9%
Dalhousie University	21	5.7%
Carleton University	20	5.4%
Concordia University	17	4.6%
University of Manitoba	17	4.6%
University of Victoria	16	4.3%
Ryerson University	15	4.1%
University of Guelph	13	3.5%
University of Ottawa	13	3.5%
York University	13	3.5%

Figure 5
Number Respondents to Apply to Each Faculty

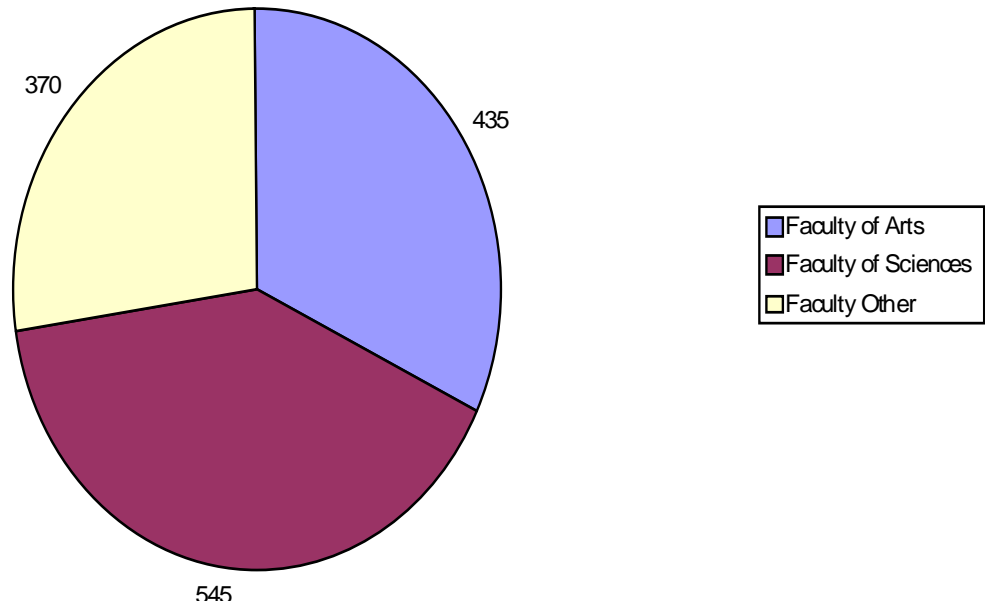


Figure 6
Faculties Applied to by Each Candidate Type

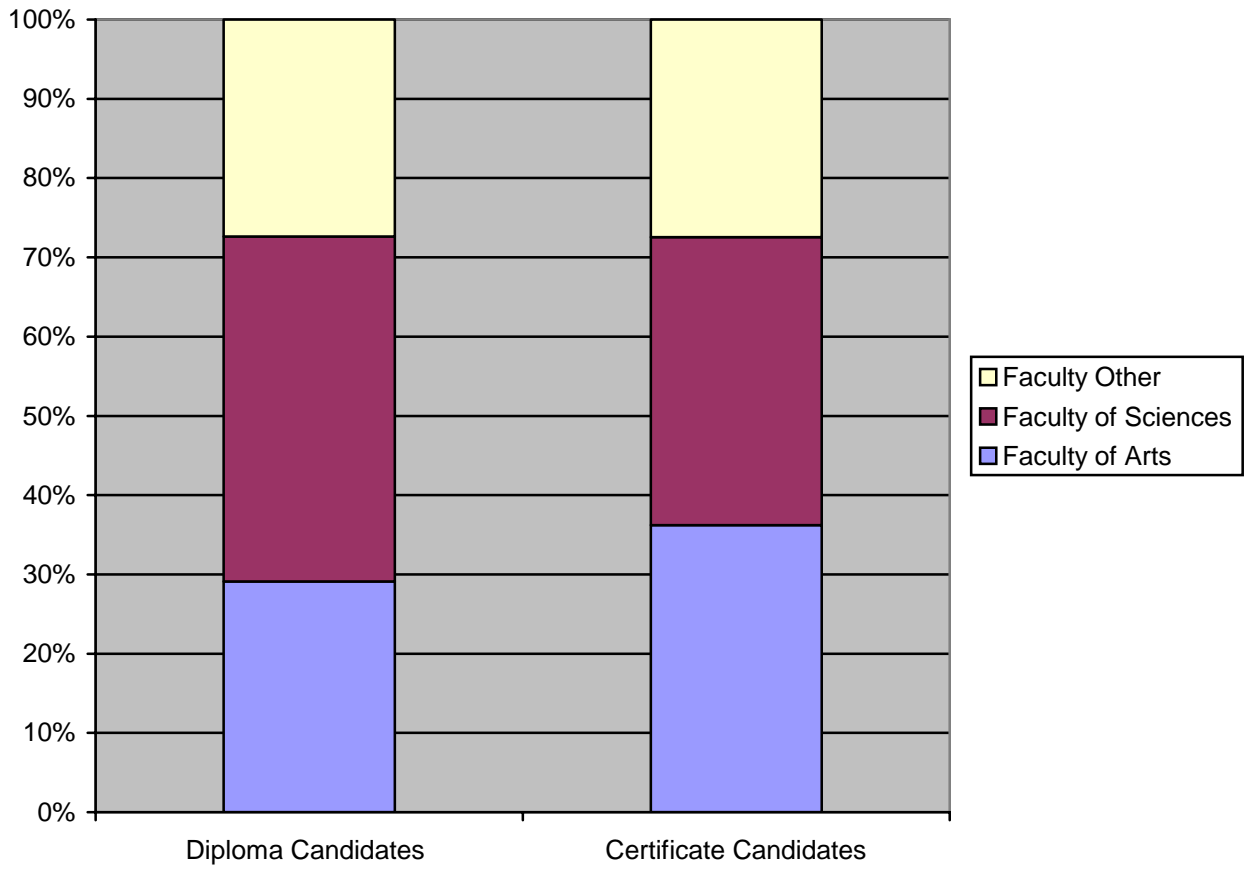
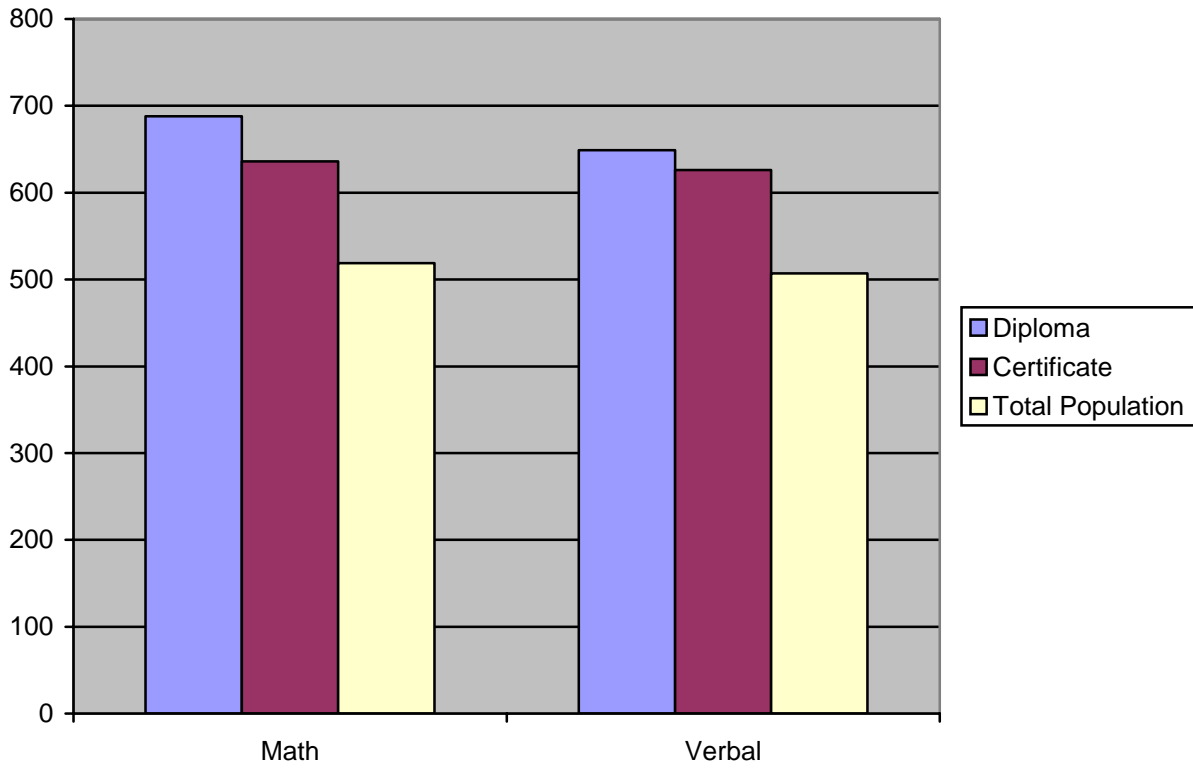


Figure 7
Respondent SAT Scores by Section



Total Population SAT Scores obtained from the College Board 2003.