SIMON FRASER UNIVERSITY

MEMORANDUM

To: Senate

From: R. Blackman, Chair
Senate Committee on Undergraduate Studies
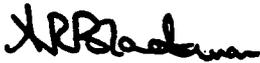
Subject: Diverse Qualifications Admission Committee (DQAC) Review for 2003
(SCUS Reference 03-16)

Date: September 15, 2003

Action undertaken at the September 9, 2003 meeting of the Senate Committee on Undergraduate Studies gives rise to the following motion:

MOTION:

"That Senate approve the recommendations in the DQAC review of extending the Diverse Qualifications Admission Policy by five years to Fall Semester 2009 with a review to occur in 2008 as set forth in S. 03- 92 ."

MEMORANDUM

TO: Senate

FROM: Bill Krane, Chair
Diverse Qualifications
Adjudication Committee

RE: Review of DQ Admission Policy

DATE: June 11, 2003

At the December 7, 1998 Senate meeting, the following motion was passed:

> "that Senate approve, as set forth in S.98-95, that the Diverse Qualifications Admission Policy be extended by five years to Fall Semester 2004, with a review to occur in 2003"

The DQAC recently concluded a review of the academic performance of DQ students who were admitted to the University over the past five years (see attached). The performance of these students was compared to a randomly selected group of normal admits with similar entrance characteristics. The major findings were as follows:

- persistence and completion rates were virtually identical for the DQ cohort and comparison group;

- both groups performed equally well in terms of semesterly GPA;

- in general, the average CGPAs of the two groups were comparable and, in some cases, the DQ cohort outperformed the comparison group;

- DQ students took more credit hours per semester than those in the comparison group, resulting in faster completion of their degrees; and,

- based on the academic standing in their last registered semester, 93% of the DQ cohort were eligible to register for the subsequent semester, versus 91% for the comparison group.

After considering these results, the DQAC undertook action at its meeting of May 29, 2003, which gives rise to the following motion:

> "that Senate approve as set forth in S.03- , that the Diverse Qualifications Admission Policy be extended by five years to Fall semester 2009, with a review to occur in 2008."

SIMON FRASER UNIVERSITY

Analysis of Students Admitted to SFU with Diverse Qualifications

1997-1 to 2002-3

Prepared by
Joanne Heslop, Analyst
Office of Analytical Studies
June 9, 2003

Analysis of Students Admitted to SFU with Diverse Qualifications
(1997-1 to 2002-3)

Introduction:

Simon Fraser University seeks to not only admit applicants who are academically very well qualified, but also those who meet minimum admission standards, present a clear and valid reason for attending the University and have:

- demonstrated commitment and/or excellence in other endeavours, or
- succeeded in their studies in spite of difficult circumstances. [1]

Up to 10% of candidates for admission to SFU can be recognized for non-academic attributes and achievements under the Diverse Qualifications Admission Policy.

Beginning in the Spring of 1997, SFU accepted its first cohort of students admitted under the Diverse Qualifications (DQ) Admissions Policy. In the Fall of 1998, the Office of Analytical Studies prepared an analysis of the 165 DQ admits from the first five entry cohorts (1997-1 to 1998-2). In response, the Diverse Qualifications Adjudication Committee (DQAC) noted, "Overall, there were insufficient data to draw firm conclusions about the success of the policy"[2] and Senate passed the motion "that the Diverse Qualifications Admission Policy be extended by five years to Fall semester 2004, with a review to occur in 2003."[3] This current report is based on an analysis of the students admitted to SFU under the DQ Policy over the six-year period, from 1997 to 2002. Refer to the Appendix for a complete set of detailed tables. Note: Appendix available upon request by contacting Bobbie Grant at 604 291-3168 or email bgrant@sfu.ca

Volume of DQ Admits:

In the six years since its inception in 1997-1, a total of 762 students have been admitted to SFU under the Diverse Qualifications Admission Policy. This represents 2.5% of all registered new students admitted in the time period, or 3.0% when Science students are omitted from the total.[4] The number of students admitted annually ranged from a low of 77 in calendar year 1998 to a high of 171 in 2001 (see Chart 1). As shown in Chart 2, the majority of the students admitted came from three basis of admission categories: BC Grade 12 (28%), Mature (23%) and BC College Transfer (21%).

---

[1] SFU Calendar, 2002/03.
[2] SCAP 98-60.
[3] S.98-95.
[4] The Diverse Qualifications Admissions Policy is not available to Faculty of Science applicants.

Chart 1

Students Admitted to SFU
With Diverse Qualifactions: 1997 to 2002
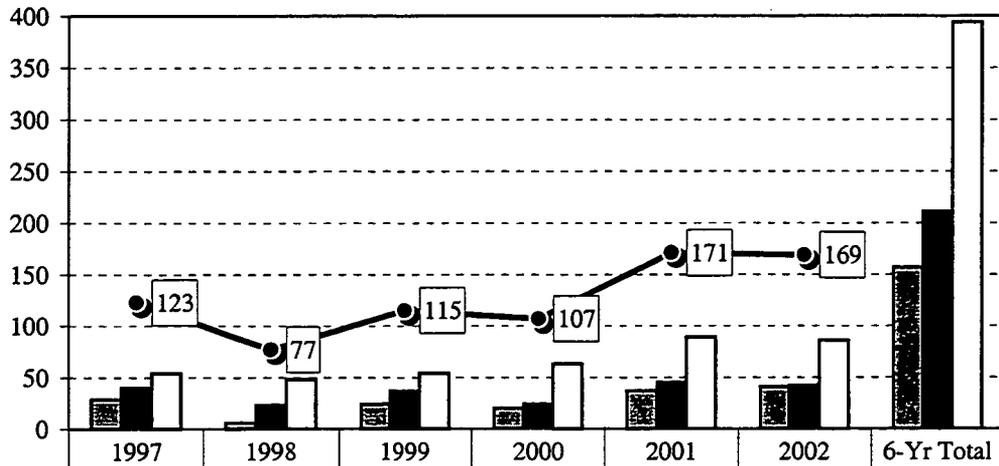
	1997	1998	1999	2000	2001	2002	6-Yr Total
B.C. Grade 12	29	6	24	20	37	41	157
B.C. College	40	23	37	24	45	42	211
Other	54	48	54	63	89	86	394
Total	123	77	115	107	171	169	762

Students reported by calendar year, 1997 to 2002.

Chart 2

% Distribution of DQ Admits
by Basis of Admission
6-Year Total (1997 to 2002)

- B.C. College — 28%
- Mature — 23%
- B.C. Grade 12 — 21%
- University Transfer — 9%
- Degree — 8%
- Canadian Grade 12 — 4%
- Technical — 3%
- College Transfer — 2%
- Foreign Grade 12/13 — 1%
- Other - Misc — 1%
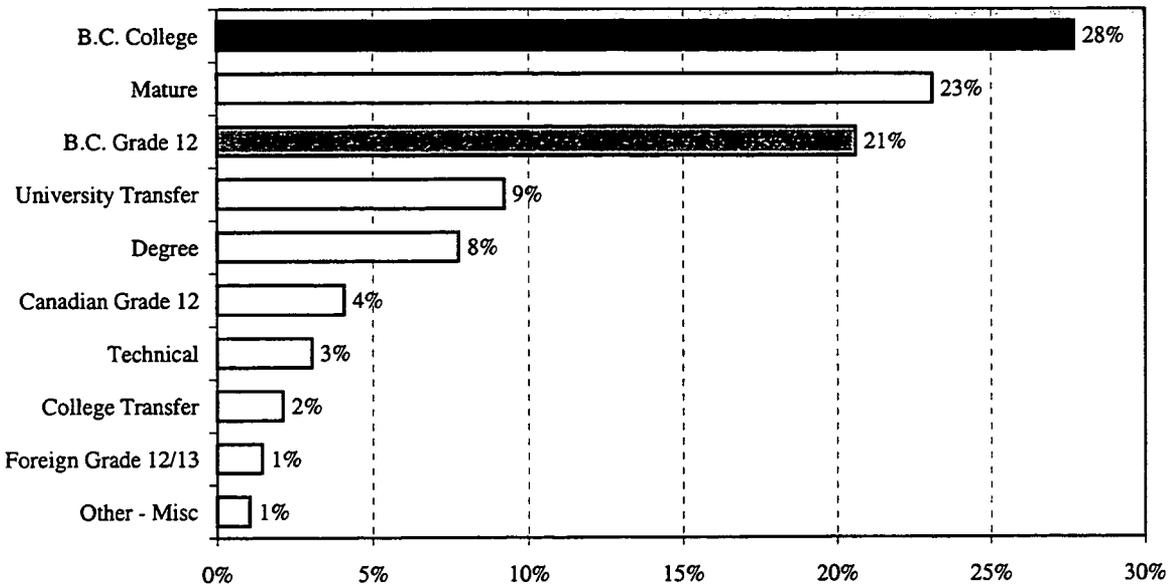
The DQ Cohort and the Control Group:

This analysis compares the cohort of 762 students admitted to SFU with diverse qualifications from 1997-1 to 2002-3 to a control group of 762 students admitted under normal academic qualifications over the same time period, with an equal number of students randomly selected from each admission semester and each basis of admission category, counting upwards from the admission GPA cut-off.

To begin the analysis, it is important to ensure that students in the DQ group and the control group have similar characteristics in terms of basis of admission, admission score, gender, age, faculty and credential sought. Charts 3a to 3f show that the DQ cohort and the control group are comprised of students with similar academic and program characteristics.

One difference between the two groups is the higher proportion of DQ students who entered the Faculty of Arts (72% of the DQ cohort versus 60% for the control group).

Another difference is evident in the higher admission scores for the control group, but this is to be expected given that the control group was selected from those students admitted just above the cut-off, while the DQ admits, by definition, were selected from below the cut-off. Charts 4a and 4b show the distribution of admission scores for the DQ and control groups. Separate distributions are provided for students admitted with admission percentage scores (secondary school students) versus admission GPA's (all other basis of admission categories). The distributions show that the control group has a greater proportion of students in the higher GPA and percentage bands and this is also reflected in the 6-year average admission scores, summarized in the table below.

6-Year Average	DQ Cohort		Control Group	
Admission Scores	GPA	%	GPA	%
# Students with Adm Score	493	169	466	193
Average Adm Score	2.72	74.7%	2.86	77.5%
Standard Deviation	0.37	3.15%	0.40	2.25%

How far above and below the admission cut-offs do the DQ and control group lie? Charts 5a and 5b show the amount of variation around the admission cut-offs each semester for BC Grade 12's and BC College Transfers. The admission cut-offs fluctuate from semester to semester, and the chart shows that students in the control group are admitted at or barely above the cut-off each semester, while students in the DQ cohort are admitted as much as seven percentage points below the BC12 cut-off and as many as 0.30 GPA points below the BC College cut-off.

Cohort Characteristics: DQ vs Control Group

Chart 3a: Basis of Admission Distribution
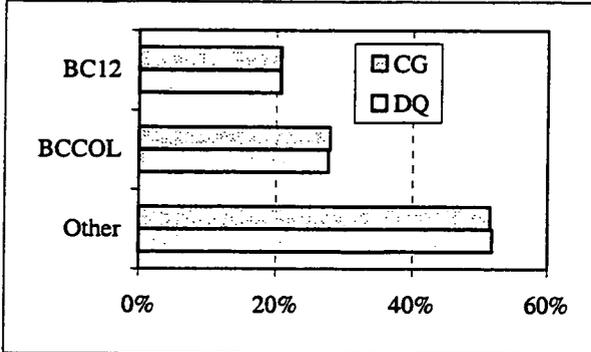
Chart 3d: Faculty at Admission
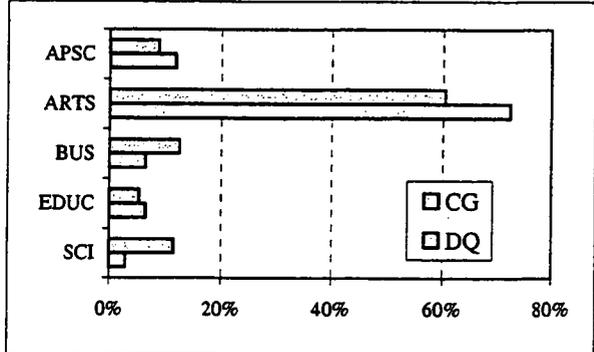
Chart 3b: Gender Distribution
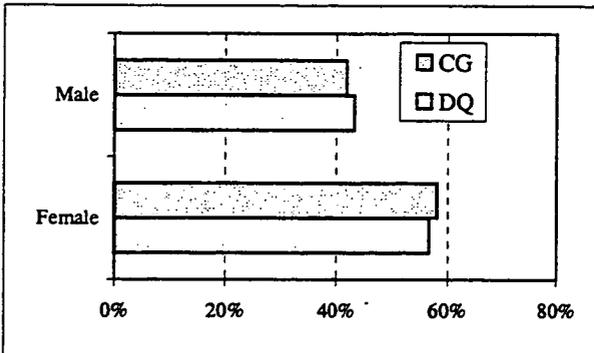
Chart 3e: Credential at Admission
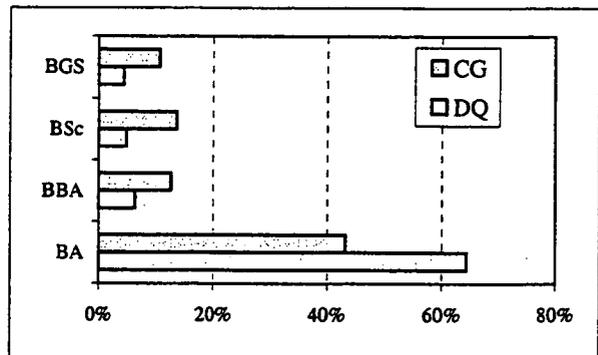
Chart 3c: Age Distribution
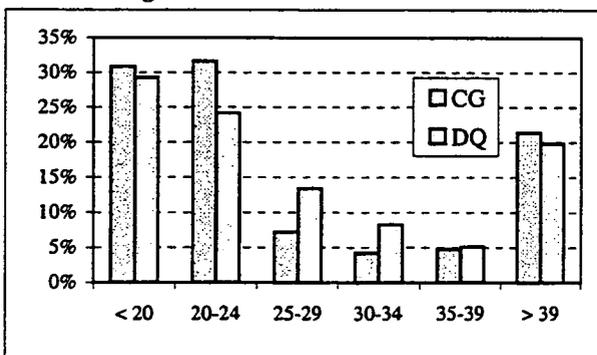
Chart 3f: Admission Scores
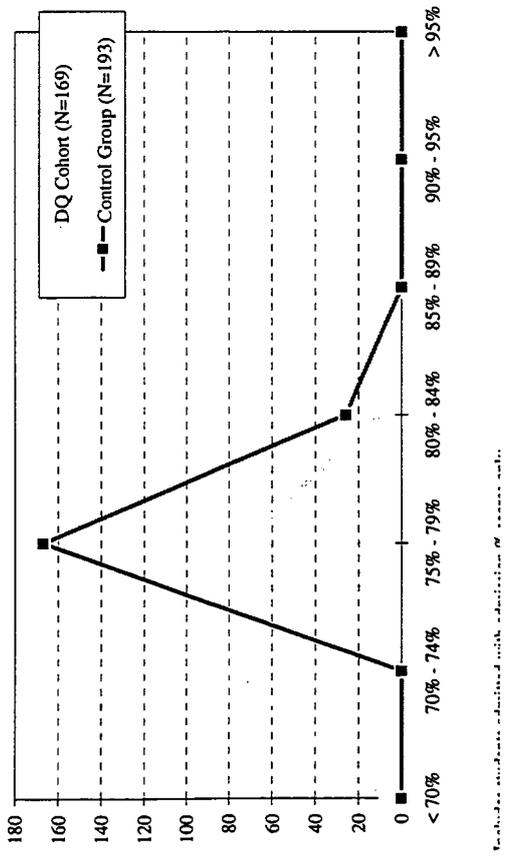
Admission Averages and Cutoffs by Semester
DQ Cohort vs. Control Group
1997-1 to 2002-3

BC Grade 12

CG ● DQ — Cutoff

Chart 5a

84.00%
82.00%
80.00%
78.00%
76.00%
74.00%
72.00%
70.00%

1997-1 1997-2 1997-3 1998-1 1998-2 1998-3 1999-1 1999-2 1999-3 2000-1 2000-2 2000-3 2001-1 2001-2 2001-3 2002-1 2002-2 2002-3

BC College Transfer Students

CG ● DQ — Cutoff

Chart 5b

3.10
3.00
2.90
2.80
2.70
2.60
2.50

1997-1 1997-2 1997-3 1998-1 1998-2 1998-3 1999-1 1999-2 1999-3 2000-1 2000-2 2000-3 2001-1 2001-2 2001-3 2002-1 2002-2 2002-3

Distribution of Admission Scores
DQ Cohort vs. Control Group
1997-1 to 2002-3

Admission GPA Distributions

DQ Cohort (N=493)
— ■ — Control Group (N=466)

Chart 4a

400
350
300
250
200
150
100
50
0

< 2.00   2.00 - 2.49   2.50 - 2.99   3.00 - 3.49   3.50 - 3.99   >= 4.00

Admission % Distributions

DQ Cohort (N=169)
— ■ — Control Group (N=193)

Chart 4b

180
160
140
120
100
80
60
40
20
0

<70%   70% - 74%   75% - 79%   80% - 84%   85% - 89%   90% - 95%   > 95%

When all intake semesters are combined over the six-year period, the mean difference from the cut-off among the DQ cohort was -3.02% for BC12's and -0.16 grade points for BC College Transfer students. By comparison, the mean difference from the cut-off for the control group was much smaller (0.00% for BC12's and 0.01 for BCCOL). Since the control group was selected from a larger sample of students with admission scores at or above the cut-off, there is less variation from the cut-offs among the control group scores than the DQ group. The mean control group scores are almost identical to the admission cut-offs each semester.

The next step in the analysis is to assess the academic performance of the DQ cohort as compared to the control group.

## Performance Comparison (DQ Cohort vs. Control Group):

There are several ways in which we can assess the academic performance of the DQ admits. First, we will look at the **persistence and completion rates**. As shown in Chart 6a, the persistence rate (proportion of admitted students who registered) and the completion rate (proportion of admitted students who completed a degree or certificate at SFU) are very similar for both the DQ and control groups over the 6-year period. Upon closer inspection, it was noted that the control group has a slightly higher completion rate at 14.0% when compared to the DQ cohort at 11.7%.

The completion rate is based on the cumulative total number of completers divided by the total number of students admitted over the 6-year period. Therefore, students admitted 6 years ago have a greater opportunity to complete than students admitted only one year ago and students admitted with no transfer credit (i.e. secondary school students) would have a lower completion rate than students admitted with some transfer credit. As a result, there is significant variation in the completion rates by basis of admission (see Chart 6b). In both the control group and the DQ cohort, students admitted with some post-secondary experience generally achieved higher completion rates than students admitted to SFU from a secondary school. In addition, the higher completion rates for the control group are reflected in the individual basis of admission categories, except among the approximately two hundred BC College transfer students where the completion rates for the DQ cohort and the control group were equal.

Since the above completion rates are based on all entry cohorts over the six years, it does not allow enough time for students who were admitted in the most recent semesters to graduate, and thus under-estimates the completion rate. To accommodate this limitation, the persistence and completion rates for those students admitted from 1997-1 to 1998-3 were examined. The chart of the persistence and completion rates of the two groups again appear similar (Chart 7a), but with the control group completion rate again slightly higher at 24.9%, compared to 22.0% for the DQ cohort.

Chart 6a

Persistence and Completion Rates
(All Entry Cohorts 1997-1 to 2002-3)

Legend:
- % of DQ Cohort Registered
- Cum % of DQ Cohort Completed
- % of CG Cohort Registered
- Cum % of CG Cohort Completed

X-axis: Semester # (1 to 18)
Y-axis: % (0% to 100%)
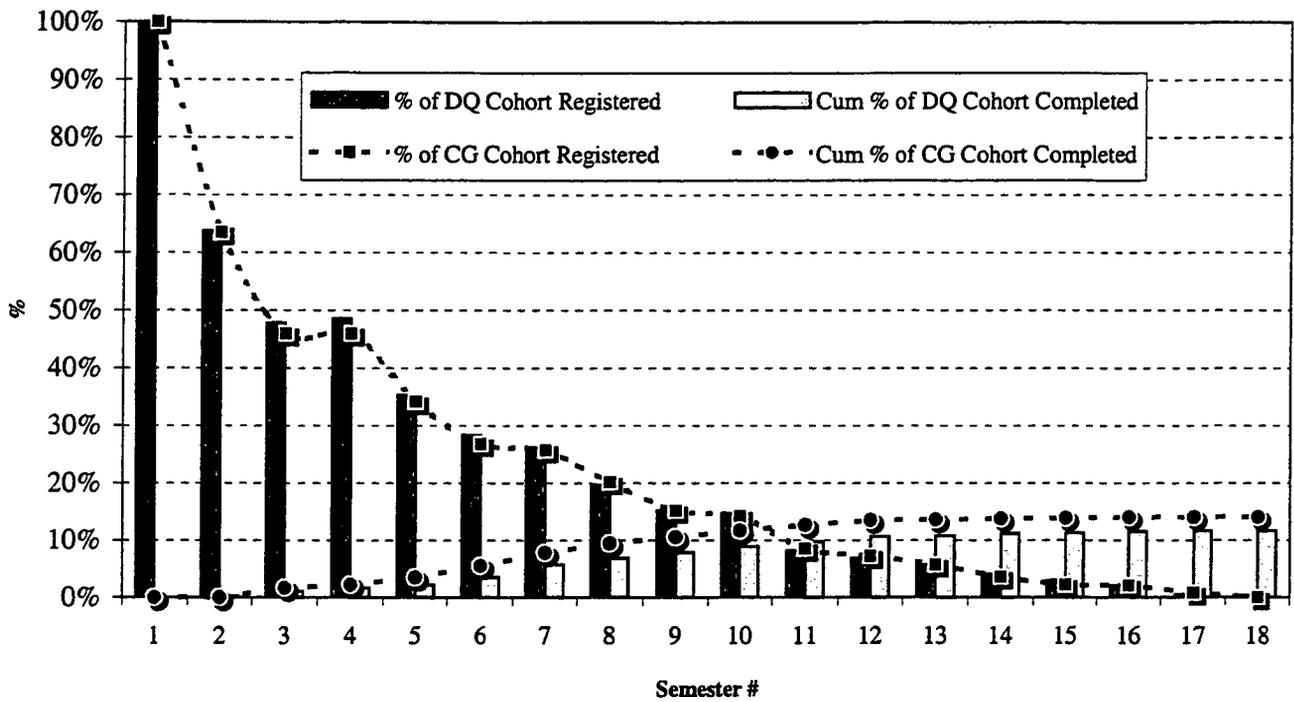
Chart 6b

Completion Rates by BOA
(All Entry Cohorts 1997-1 to 2002-3)

Categories: Degree, College Transfer, University Transfer, Technical, B.C. College, Mature, Canadian Grade 12, B.C. Grade 12, Other - Misc, Foreign Grade 12/13

Legend: CG, DQ

X-axis: 0% to 45%
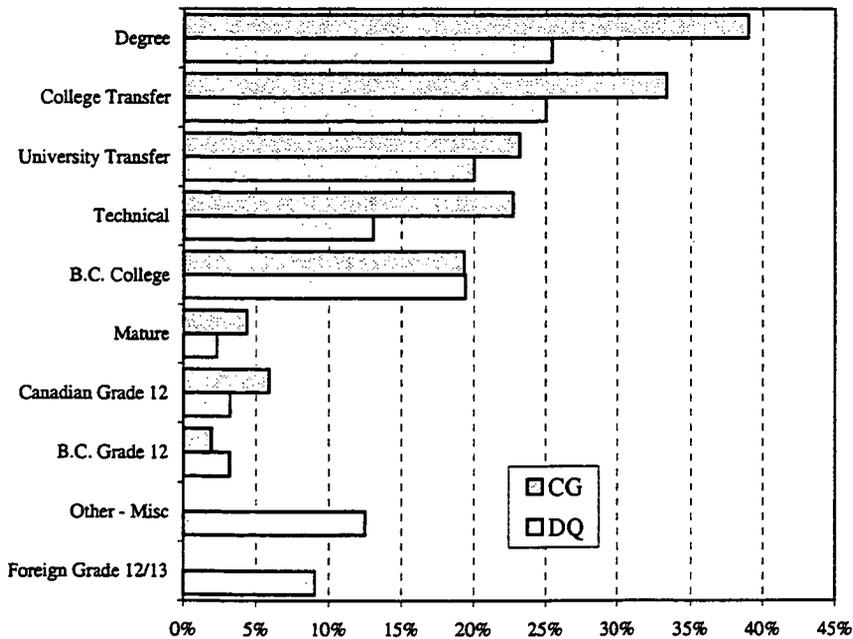
Basis of Admission	# Admitted	
	DQ	CG
Degree	59	59
College Transfer	16	15
University Transfer	70	69
Technical	23	22
B.C. College	211	212
Mature	176	138
Canadian Grade 12	31	34
B.C. Grade 12	157	156
Other - Misc	8	6
Foreign Grade 12/13	11	9
TOTAL	**762**	**720**

Note: Excludes students in the Integrated Studies Program.

Chart 7a

Persistence and Completion Rates
(Entry Cohorts 1997-1 to 1998-3)

Legend:
- ■ % of DQ Cohort Registered
- □ Cum % of DQ Cohort Completed
- ·-■-· % of CG Cohort Registered
- ·-●-· Cum % of CG Cohort Completed

X-axis: Semester #
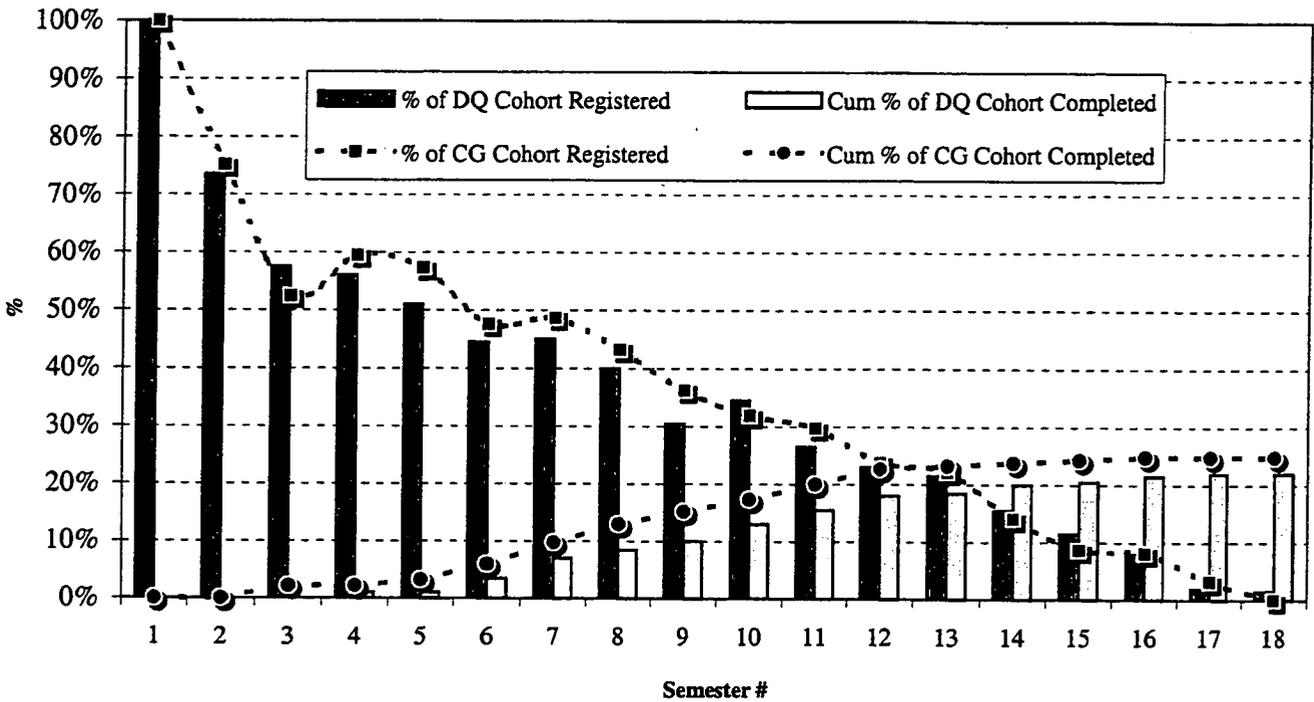
Chart 7b

Completion Rates by BOA
(All Entry Cohorts 1997-1 to 1998-3)

Categories (top to bottom): Degree, Mature, University Transfer, College Transfer, B.C. College, Canadian Grade 12, B.C. Grade 12, Other - Misc, Technical, Foreign Grade 12/13

Legend: □ CG □ DQ
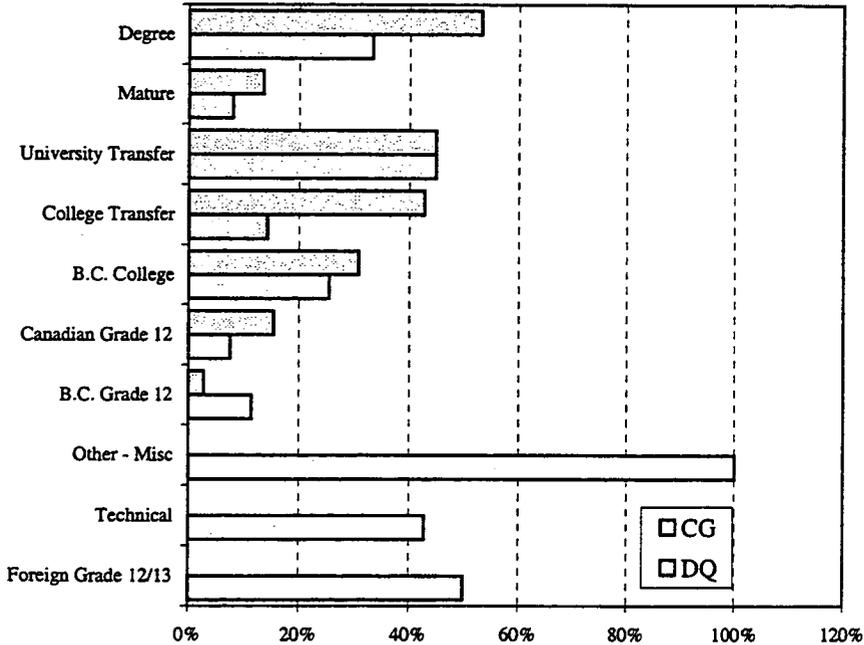
Basis of Admission	# Admitted	
	DQ	CG
Degree	15	15
College Transfer	7	7
University Transfer	20	20
Technical	7	5
B.C. College	63	65
Mature	37	22
Canadian Grade 12	13	13
B.C. Grade 12	35	35
Other - Misc	1	1
Foreign Grade 12/13	2	2
TOTAL	**200**	**185**

Note: Excludes students in the Integrated Studies Program.

The slightly higher completion rate for the control group can be partially explained by the fact that the DQ cohort completed an average of five more credits in total than the control group. With SFU credits and transfer credit combined, of those students who graduated with a degree, the DQ cohort completed 128 hours on average while the control group completed 123.

In relation to completion rates, the second indicator we will examine is the **time to degree completion**. This is a simple count of the number of semesters from the point of admission until the graduation semester. Of those students who completed a degree at SFU and were admitted between 1997-1 and 1998-3, both the DQ students and the control group took approximately three years on average to complete their bachelor's degree (10 semesters for the DQ cohort and 9 semesters for the control group). Note that both cohorts entered SFU with an average of nearly one year of transfer credit.[5]

The third indicator of interest when looking at degree completers is the extent of **switching between faculties** -- whether the completers received their credential from the same faculty they were initially admitted to. Almost all completers from each cohort received their credential from the same faculty into which they were admitted (93% for the DQ cohort and 92% for the control group). In other words, among the completers, there was a minimal amount of switching between faculties before completion. We can drill down further and look at the extent of switching between credentials among the completers, and again there is little difference between the two groups (88% of the DQ completers finished the same credential they started versus 89% of the control group).

A fourth performance measure is the **semester GPA**, the grade point average calculated on courses completed each semester. Chart 8 shows that students in the DQ cohort had higher semester GPA's than the control group in each of the first four semesters; subsequent semesters showed similar semester GPA's between the DQ and control group until the 9th and 10th semester when the DQ cohort again showed higher semester GPA's. By the 11th semester of registration, there are not enough students registered to make reliable comparisons of the GPA's. Although, it is evident that those few students in the DQ cohort who continued to register beyond the 13th semester experienced declining semester GPA's.

A fifth performance measure is the **cumulative grade point average** (CGPA) calculated on all courses completed since admission to SFU. Chart 9 shows that, on average, students in the DQ cohort achieved higher CGPA's after the first semester, compared to the control group, but both groups performed equally as well, with the control group performing slightly better than the DQ cohort in the second year at SFU. By the 11th semester or 4th year, the number of students registered becomes too small to draw valid conclusions about their relative academic performance. Only those students registered in the semester are included in Chart 9.

---

[5] Depending upon each student's pace and the number of credits they transferred to SFU, some completed in less time and others completed in more time. It was not possible to examine the time to completion for students without any transfer credits. An insufficient number of students had graduated after entering SFU without transfer credits, but given a longer time horizon, this would be possible in a future analysis.

Chart 8

Semester GPA by Semester
(DQ vs. Control)

Legend:
- ☐ # DQ Registered
- ☐ # CG Registered
- DQ Cohort Sem GPA
- △ Control Group SemGPA

Y-axis left: Sem GPA (1.50 to 3.50); Y-axis right: # Registered in Semester (0 to 900); X-axis: Semester # (1 to 18)
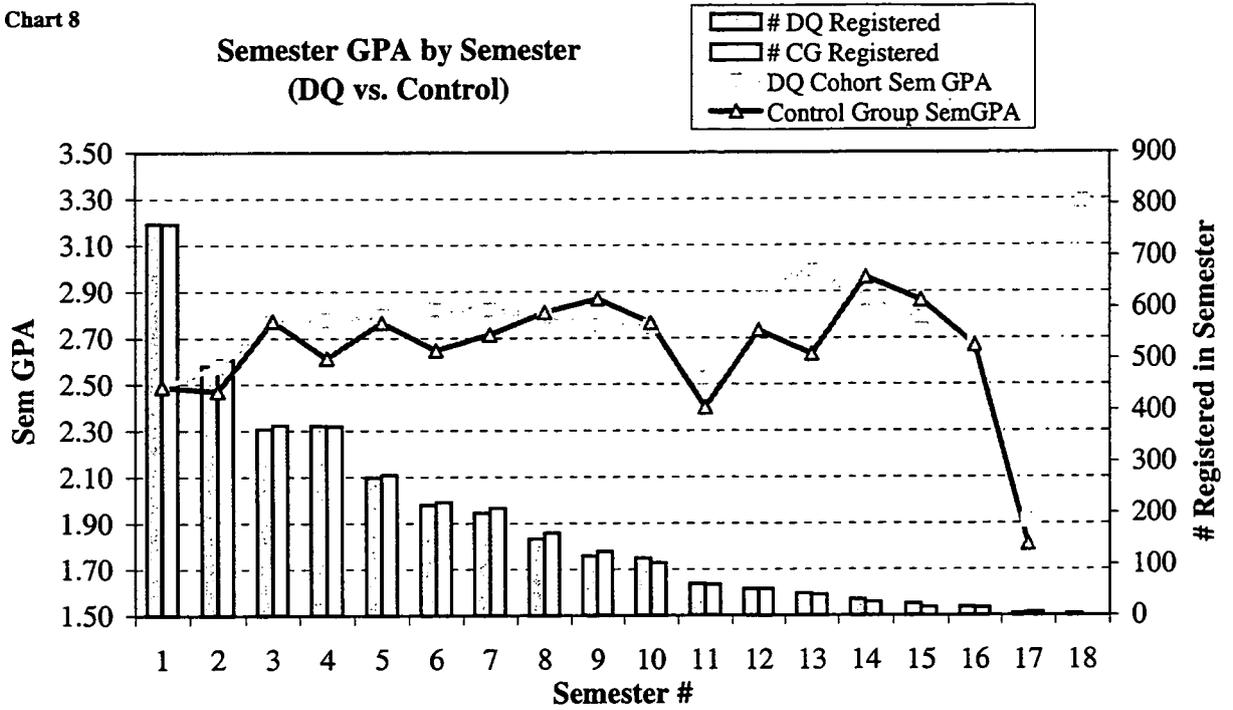
* Note: Excludes students not registered in the semester.

Chart 9

Cumulative GPA by Semester
(DQ vs. Control)

Legend:
- ☐ # DQ Registered
- ☐ # CG Registered
- DQ Cohort CGPA
- △ Control Group CGPA

Y-axis left: CGPA (1.50 to 3.50); Y-axis right: # Registered in Semester (0 to 900); X-axis: Semester # (1 to 18)
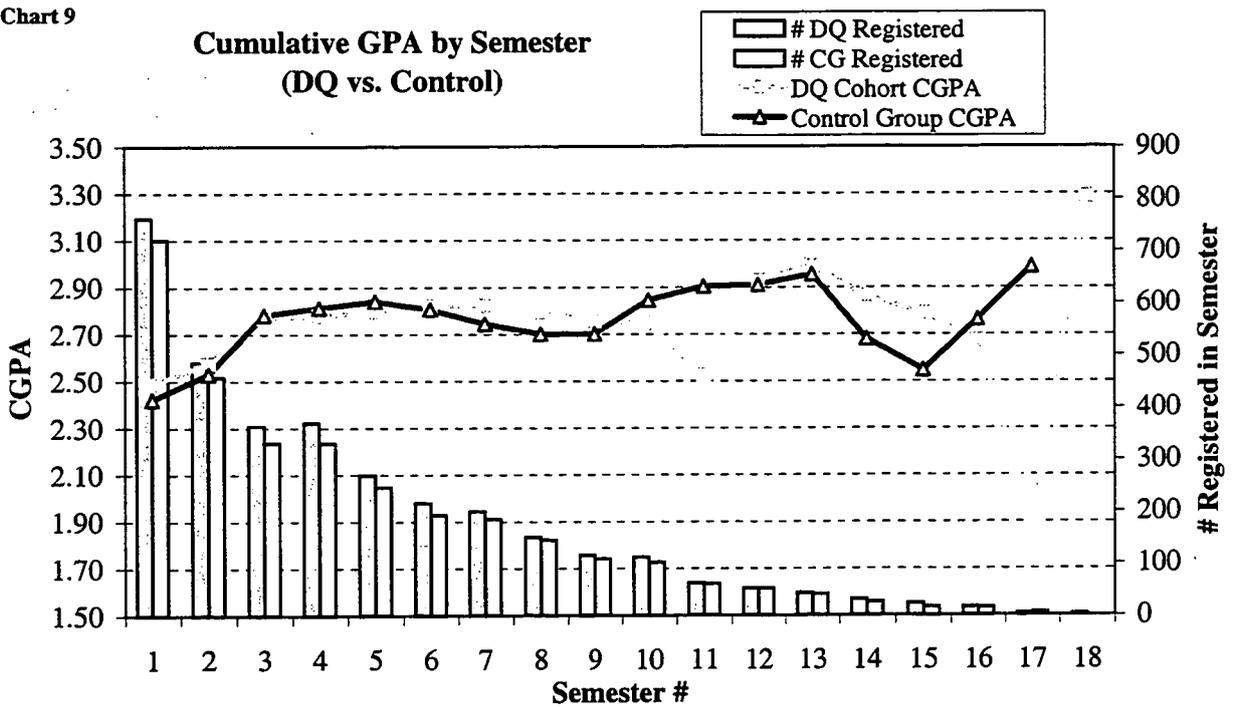
* Note: Excludes students not registered in the semester.

Chart 10 provides another perspective on the CGPA of the DQ and control groups. This chart compares the CGPA of the DQ and control groups, but only in their last semester of registration. One noteworthy observation is that nearly 400 students from each of the DQ and control group were still registered at SFU in the Fall of 2002, with CGPA's of 2.64 and 2.56 respectively. Given that each cohort is comprised of 762 students, these CGPA's in 2002-3 are derived from approximately one-half of the students in the respective cohorts. The other observation from this chart is the general upward trend in CGPA's of both the DQ cohort and the control group. The mean CGPA of those students who last registered prior to 2001 is approximately 0.40 grade points below those who last registered in 2002-3. A comparison of the mean CGPA across all 762 students in each cohort shows that the cumulative academic performance of the DQ cohort is almost one tenth of a grade point above the control group (2.49 versus 2.40).

Comparing CGPA's after each semester of registration or in the last registered semester does not compare students at equally comparable stages of progress in their SFU program, since students do not all register for the same number of hours each semester. Therefore, Chart 11 shows the cumulative GPA's after each of 15 SFU credit hour increments. DQ students who completed fewer than 15 credit hours or more than 75 credit hours attained higher CGPA's than the control group. Again, there is a general upward trend in CGPA among both the DQ and control group: the more hours a student completes at SFU, the higher the CGPA. In fact, when comparing the mean CGPA's of those who completed ninety or more credit hours versus those who completed fewer then fifteen hours, we see that the increase in CGPA is 0.64 among the DQ cohort and almost one full grade point (0.94 grade points) among the control group.

A sixth performance measure is the students' **academic standing** at the end of their last registered semester. This academic standing determines whether a student is eligible to re-register in the following semester. A student is eligible to re-register if their academic standing is one of the following:
   Blank – not evaluated, or
    GAS – good, or
    OAP – on academic program (CGPA < 2.00), or
    CAP – continued academic probation.
All other academic standings indicate a student is performing unsatisfactorily and therefore ineligible to re-register. Chart 12 shows the proportion of students in each cohort by academic standing. As at their last registered semester, 93% of the DQ cohort were eligible to re-register, compared to 91% of the control group.

A seventh and final performance measure looks at the performance of students by Faculty of admission. The measurement for comparison between the DQ cohort and the control group is the **cumulative grade point average by Faculty**. As shown in Chart 12, students admitted to the Faculty of Arts and Business Administration performed equally well, while Applied Science, Education and Science students in the DQ cohort performed better than the control group.

Chart 10

Cumulative GPA by Last Registered Semester (DQ vs. Control)

Legend:
- # DQ Registered
- # CG Registered
- DQ Cohort CGPA
- Control Group CGPA

X-axis (Last Registered Semester): Pre-2001, 2001-1, 2001-2, 2001-3, 2002-1, 2002-2, 2002-3

Left Y-axis (CGPA): 1.50 to 2.90
Right Y-axis (# Registered in Sem): 0 to 400
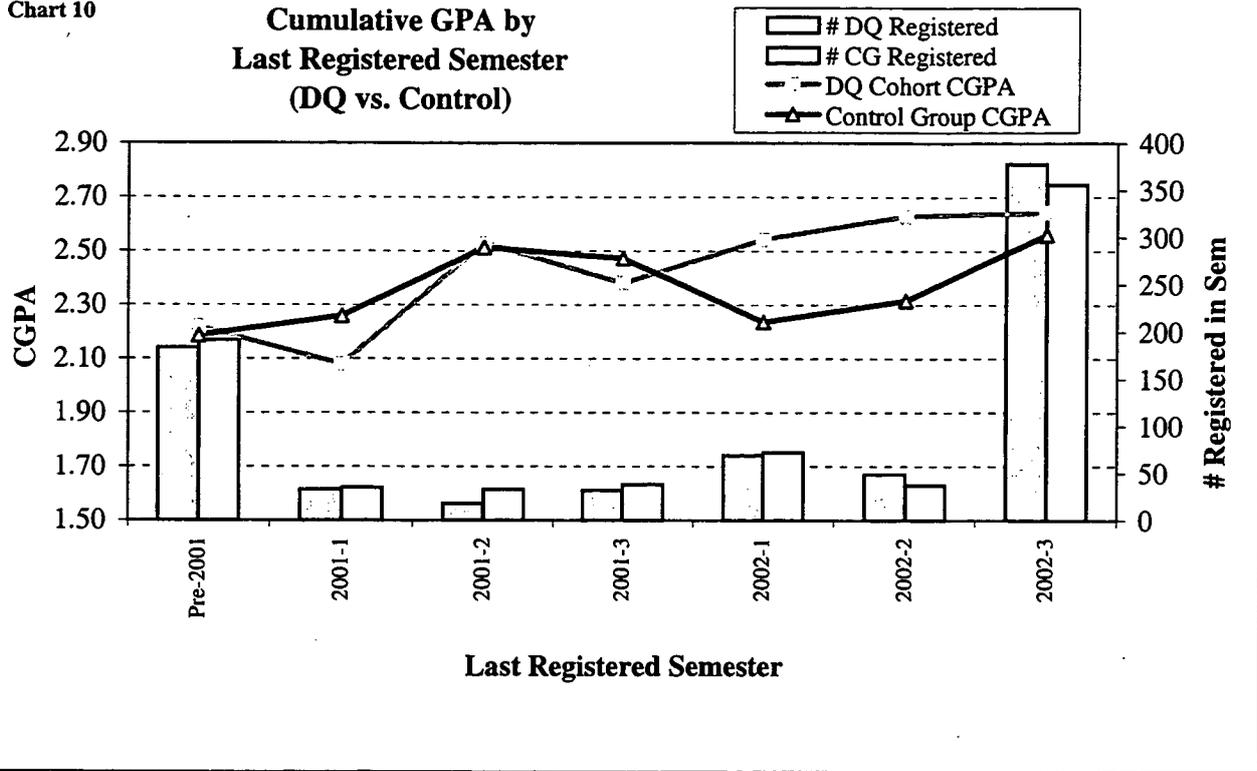
Chart 11

CGPA by SFU Hours Passed (All Entry Cohorts 1997-1 to 2002-3)

Legend:
- # DQ
- # CG
- DQ CGPA
- CG CGPA

X-axis (SFU Hours Passed): <15, 15 - 29, 30 - 44, 45 - 59, 60 - 74, 75 - 89, >= 90

Left Y-axis (CGPA): 1.50 to 3.10
Right Y-axis (# Students): 0 to 300
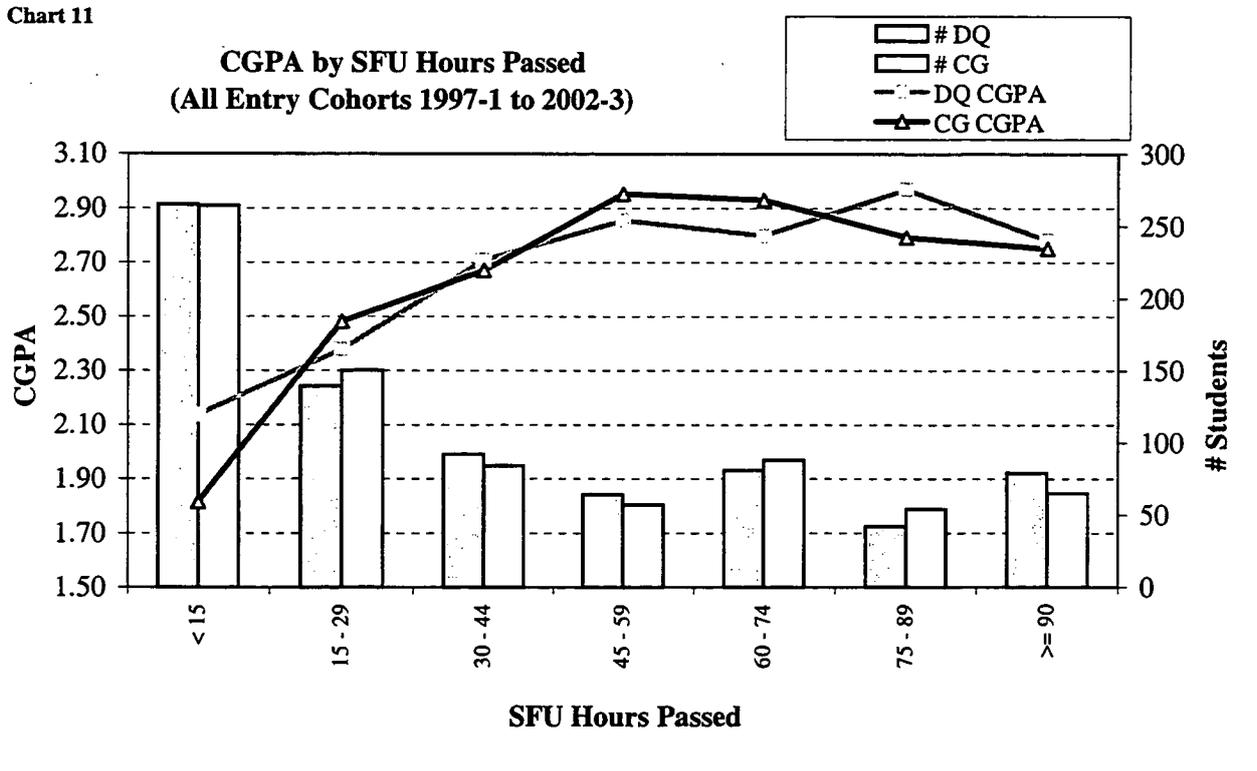
Chart 12

Academic Standing in Last Registered Semester

Bar chart showing Academic Standing in Last Registered Semester with categories on vertical axis and percentage (0% to 100%) on horizontal axis.

Category	Value
Subtotal: Eligible to Re-Register	91% / 93%
GAS - Good	
Blank - Not evaluated	
OAP - On Acad. Probation (CGPA < 2.00)	
CAP - Continued Academic Probation	
Subtotal: Ineligible to Re-Register	9% / 7%
RTW - Required to Withdraw	
ING - CGPA < 1.00 Last 2 sems	
INF - N/F Grade(s) Last 2 sems	
INW - Withdrew 3 sems in a row	

Legend: □ CG □ DQ

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Chart 13

CGPA by Faculty
(All Entry Cohorts 1997-1 to 2002-3)

Students

Legend:
- #DQ
- #CG
- DQ
- CG

CGPA axis: 2.90, 2.70, 2.50, 2.30, 2.10, 1.90, 1.70, 1.50

Students axis: 900, 800, 700, 600, 500, 400, 300, 200, 100, 0

Faculty at Admission: APSC, ARTS, BUS, EDUC, SCI, Total Cohort

Faculty at Admission

Analysis of Diverse Qualifications Admits (1997-1 to 2002-3)
Office of Analytical Studies
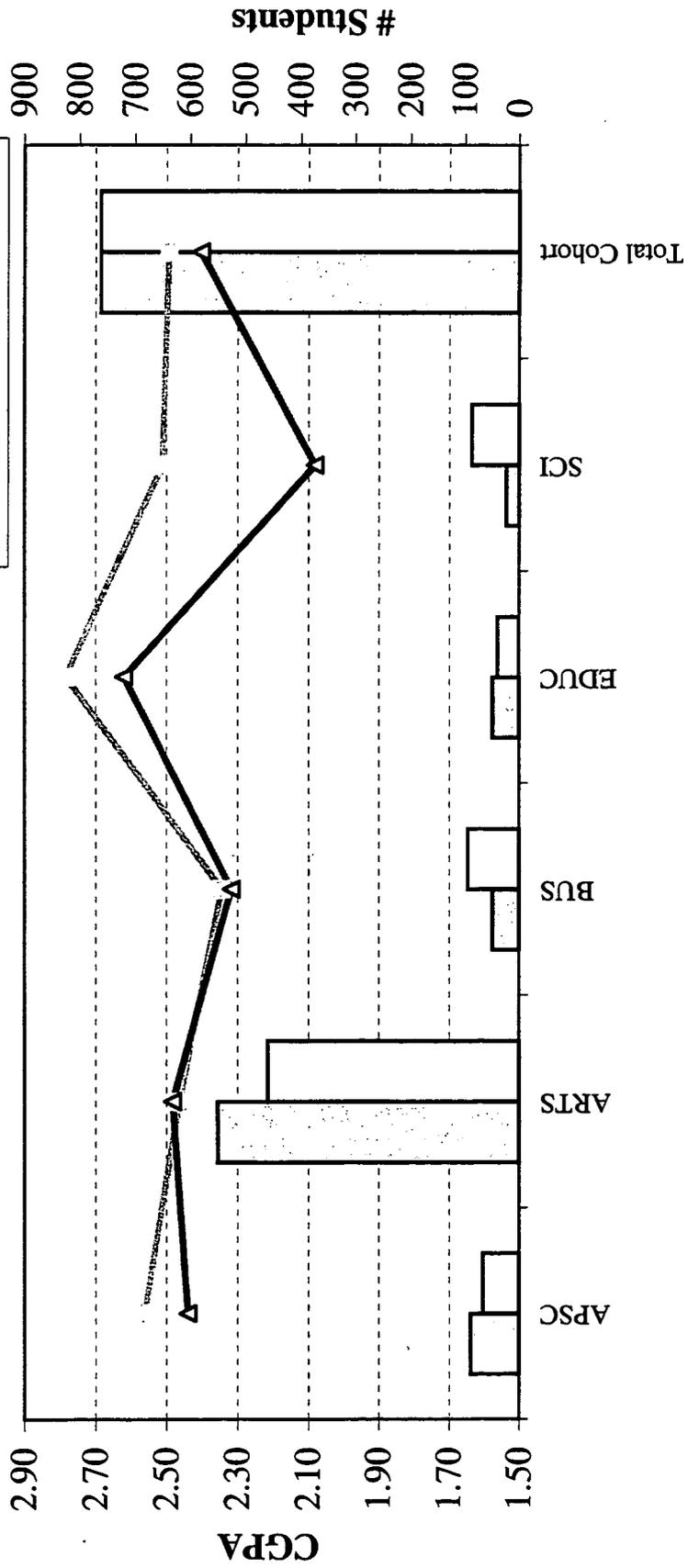
Conclusion:

After comparing the 762 DQ admits to the control group, the following conclusions can be drawn:

1) The persistence and completion rates of both groups are roughly equal. Although the completion rate for the control group is slightly higher (14% versus 12%), the difference becomes less significant when we recognize that the DQ completers finished with five more credits on average than the control group.

2) Both groups entered SFU with an average of one year of transfer credit and completed, on average, within three years of entering SFU.

2) The DQ cohort shows higher semester GPA's than the control group in the first and third year at SFU, but semester GPA performance beyond the 5th year tends to decline.

3) Among the completers in both the DQ cohort and the control group, there was very little switching between faculties. Only 6% of the DQ cohort and 7% of the control group switched faculties from the time of admission to the time of completion.

4) On average, students in the DQ cohort attained a CGPA of 2.49 versus 2.40 among the control group. Approximately one-half of the students in each of the DQ and control group were registered in 2002-3. Of those who were registered in Fall 2002, their mean CGPA's were 2.64 among the DQ cohort and 2.56 among the control group. For both groups, the more hours a student completes at SFU, the higher the CGPA.

5) Based on the academic standing in their last registered semester, 93% of the DQ cohort (versus 91% of the control group) were eligible to re-register in the following semester.

6) Students admitted to the Faculty of Arts and Business Administration performed equally well, while Applied Science, Education and Science students in the DQ cohort performed better than the control group.

Overall, the Diverse Qualifications Admissions Policy appears to be working very well - it allows students to be admitted to SFU who would not otherwise be qualified and these students perform academically on par with those admitted at the cut-off margins under normal academic qualifications.