

Executive Summary - Students With Disabilities At Dawson College: Success And Outcomes

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Executive Summary

Abstract

In an archival study the academic outcomes of 653 Dawson College students with and 41,357 without disabilities were compared over a 12 year period starting in 1990 and ending in 2002. Results indicate that students with both physical and learning disabilities had graduation rates that were virtually identical to those of non-disabled students, although students with disabilities took approximately one semester longer to graduate. When average grades and course pass rates were examined, students with disabilities generally did at least as well, and in some cases significantly better than their non-disabled peers. The overall trend for grades and course pass rates was for students with learning disabilities/attention deficit disorder (ADD) to have similar or slightly poorer outcomes than the non-disabled sample, and for students with all other disabilities to have slightly superior outcomes. Males had poorer results than females with respect to all indicators. This was true for students both with and without disabilities.

Preamble

The academic outcomes of 653 students who made a request for disability related services at Dawson College (students with disabilities) were compared to those of 41,357 students who did not make a request for services (non-disabled students).

Dawson College is a junior / community college (public cegep) located in downtown Montreal. It offers diplomas (DEC: Diplôme d'études collégiales) in two year pre-university programs (pre-university sector – courses of study such as health science and social science) and three-year career programs (courses of study such as nursing and mechanical technology). It also offers preparatory sessions as well as continuing education courses.

To be included in the study, students (1) must have enrolled at Dawson College for the first time between the autumn session of 1990 and the winter session of 2002, and (2) must have had no prior history of having studied at a cegep. Of the 722 disabilities recorded for the 653 students (some students had more than one disability), 52.6% (380) were learning disabilities and/or attention deficit disorder (ADD) and 47.4% (342) were other disabilities such as visual, hearing, speech, orthopedic, psychiatric and medical impairments.

Four outcome measures were examined: graduation rates, average grades in the first semester, course pass rates (percent of courses taken that were passed), and course success rates (percentage of students who passed 100% of the courses they undertook in the first semester).

Characteristics of The Samples

When students with and without disabilities were compared, it was found that a higher proportion of students with disabilities were enrolled in pre-university programs (72.7% vs 60.8%) and a lower proportion in continuing education (8.3% vs 22.1%). The proportion enrolled in careers programs was the same for both groups (11.3%). The remaining students from both groups were enrolled in preparatory sessions. The difference in the proportions of students enrolled across sectors was statistically significant. The majority of students from both groups were enrolled in the pre-university social science program.

The group of students with disabilities were, on average, about a year younger (19.4 vs 20.5) and a greater proportion of them were aged 19 or under (77.3% vs 72.2%) when they first entered Dawson College. This age difference is due primarily to the larger proportion of older non-disabled students registered in continuing education courses. The mean age for students both with and without disabilities in careers programs was 19.3 years. The mean for students with disabilities in pre-university programs was 18.7 years while those for students with no disabilities it was 18.3 years.

Other differences include: (1) a larger proportion of the sample of students with disabilities was male, had English as their mother tongue, and were born in Canada or the USA than was the case for the non-disabled sample; (2) students with disabilities tended to enter Dawson College with lower Secondary V (high school leaving certificate) averages. These differences were statistically significant.

Graduation Rates

Graduation rates were calculated for students enrolled full-time in diploma programs. The sample was finalized in May, at the end of the 2002 winter session. This allowed all students included in the sample at least two additional years beyond the minimum time required to complete their diplomas. Therefore, only students who commenced in two-year pre-university programs between 1990 and 1998 or in three-year career programs between 1990 and 1997 were included in analyses of graduation rates. This resulted in a sample of 316 students with various physical, sensory and learning disabilities and 18,747 students with no disabilities.

Two-year pre-university programs. Of the 269 students with all types of disabilities who commenced in two-year pre-university programs between 1990 and 1998, 55.0% had graduated (or were eligible to graduate) by the end of May 2002. During the same period, 54.5% of the 16,053 non-disabled students had graduated or were eligible to do so. The difference was not significant. When the pre-university sample was divided into those with disabilities other than learning disabilities (including multiple impairments) (N=123), and those with learning disabilities and/or ADD (N=146), the graduation rates were 54.5% and 55.5%, respectively. Again, the difference was not significant.

Three-year career programs. Similarly, of the 47 students with disabilities who commenced in three-year career programs between 1990 and 1997, 53.2% had graduated or were eligible to do so by the end of May 2002. The rate for the 2694 non-disabled students during the same period was 51.7%. The difference was not significant.

Time taken to graduate. As expected, students with disabilities took slightly longer to graduate than their non-disabled peers. For the 9 pre-university cohorts who commenced between 1990 and 1998, students with disabilities took, on average, 6.0 semesters to graduate. Non-disabled students took, on average, 5.2 semesters. For the 8 career program cohorts commencing between 1990 and 1997, the time taken to graduate was 8.2 semesters for students with disabilities and 6.9 semesters for the non-disabled students. These differences, which could be attributed to the fact that students with disabilities, on average, took lighter course loads, were statistically significant. Thus, there was approximately a one-semester difference for both two-year pre-university and three-year career programs.

Average First Semester Grades

Two sets of analyses were carried out. Average first semester grades were calculated for all students including those in continuing education, for the total period between 1990 and 2002. This includes grades for students who commenced in the winter session. To allow for comparisons of students enrolled in the same program, we also analyzed grades for the subgroup of students who were enrolled in the Social Science program. This is the program where the majority of both samples of students were registered. Because course requirements for these students are the same, differences due to discrepancies in field of study should not influence the results.

All students. When the average first semester grades of the 632 students with disabilities were compared to those of the 40,262 non-disabled students, there was no statistically significant difference between the two groups (66.3% vs 65.9%, respectively).

The first semester grade averages of males tended to be lower than that of females for both groups of students. When males with and without a disability were compared for all programs there was no significant difference (63.3% vs 63.2%, respectively). There was also no significant difference between females with and without a disability for all programs (69.4% vs 68.3%, respectively). However, when corrected for Secondary V averages, both males and females with disabilities performed significantly better than expected when compared to their male and female non-disabled counterparts.

When the average of the first semester grades of 347 students with a learning disability/ADD were compared to the average grades of 285 students with all other disabilities, the average was significantly lower for those who had learning disabilities/ADD (63.7% vs 69.5%). When grades of students with learning disabilities/ADD were compared to grades of non-disabled students (63.7% vs 65.9%), the difference was not significant.

Grades in Social Science. When grades in the Social Science program were examined, students with disabilities (N=269) had significantly higher grade averages than their non-disabled peers (N=13,908), even when the Secondary V average was not taken into consideration as a covariate (66.0% vs 62.3%).

Females with disabilities in Social Science had averages that were significantly higher than their non-disabled peers, whether or not a correction was made for the Secondary V average (70.9% vs 65.6%). Males with disabilities also had significantly higher average grades compared to their non-disabled counterparts (62.7% vs 58.7%), and performed better than would have been predicted by their incoming average.

When grades of students with learning disabilities/ADD were compared to the average grades of non-disabled students in Social Science (63.6% vs 62.3% respectively) the difference was not significant.

Course Pass Rates

All students. Of 3,385 grades for students with disabilities, 81.2% were passing grades. This compares to a pass rate of 80.5% for the non-disabled group. The difference was not significant. The pass rate of students with learning disabilities (78.3%), however, was significantly lower than that of both non-disabled students (80.5%) as well as students with all other disabilities (85.1%).

Social Science. The difference in course pass rates in the Social Science program, however, show that students with disabilities, in general, had a significantly higher pass rate than non-disabled students (80.5% vs 76.6%). The pass rate for students with learning disabilities/ADD (77.4%) was not significantly different from the pass rate for non-disabled students, although it is significantly worse than the pass rate for students with other disabilities (86.0%).

Course Success

The proportion of students enrolled in full-time diploma (DEC) programs who passed 100% of their first semester courses was evaluated for all programs and Social Science.

All programs. There was no significant difference between students with and without disabilities (49.2% vs 49.4%, respectively). There was a significant difference for students with learning disabilities/ADD compared to the group with all other disabilities (43.4% vs 57.1%) as well as with the non-disabled group, with students with learning disabilities having lower course success rates.

Social Science. The course success rate for students with disabilities was significantly higher than that on non-disabled students (48.1% vs 41.4%). The success rate for students with learning disabilities/ADD (41.6%), however, was not significantly different from that for non-disabled students (41.4%), although it was significantly worse than the rate for students with other disabilities (58.8%).

Summary

The findings indicate that students with disabilities at Dawson College had graduation outcomes that were virtually identical to those of non-disabled students. The main difference was that students with disabilities took, on average, approximately one semester longer to graduate. When average grades were examined, students with disabilities did at least as well as, and in some cases significantly better, than their non-disabled peers. When students with disabilities were divided into two groups, students with learning disabilities/ADD and students with all other disabilities, the overall trend was for students with learning disabilities/ADD to have similar or slightly poorer academic outcomes than the non-disabled sample, and for students with all other disabilities to have slightly superior outcomes. Males had poorer results than females on all indicators. This was true for both students with and without disabilities.

Implications

What do these findings mean for the cegep system and Québec society? Should students with disabilities be encouraged to attend postsecondary education? Are funds spent on supporting them in college well spent? Absolutely!

Contact Information

For additional information and the full report, consult the Adaptech Research Network web site or contact one of the principal investigators.

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