



A Comparison of CaPROMISE Students Who Exited with either High School Diplomas or Certificates of Completion¹

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Introduction

The purpose of this inquiry was to compare the profiles of two groups of exited CaPROMISE students; those who earned High School Diplomas (n=435) and those who earned Certificates of Completion (n=163). The data examined for the purpose of this comparison were drawn from the CaPROMISE Data Management System (DMS) and contains records through Project Year 5 (9/30/18).

The impetus for this statistical comparison was the desire to determine if there was a noteworthy pattern of differences in DMS data profiles of these two groups of exited students. Data examined included demographic and service delivery records. While this inquiry was of value in that it documented statistical differences in the DMS data profiles of the two groups, it was not possible to state with certainty the cause of those differences. In order to address causal factors, additional inquiries – both quantitative and qualitative in nature – would need to be conducted.

Comparison of Demographic Data

Regarding gender, there were no significant differences between the two groups. Descriptive data appears in Table 1 below.

Table 1: Gender

| Exit Status | Gender | | Total |
|---------------------------|--------------------|--------------------|-------------------|
| | Male | Female | |
| CERTIFICATE OF COMPLETION | 106 (65.0%) | 57(35.0%) | 163 (100%) |
| HIGH SCHOOL DIPLOMA | 289 (66.4%) | 146 (33.6%) | 435 (100%) |
| Total | 395 (66.1%) | 203 (33.9%) | 598 (100%) |

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Regarding age at enrollment, in the CaPROMISE Program, the Certificate students were significantly older than the Diploma students, Chi-square ($df=1$, $n=598$) = 7.64, $p=.024$. Descriptive statistics related to this finding are shown in table 2 below. Shaded areas indicate higher percentages related to this finding.

Table 2: Age at CaPROMISE Enrollment

| Exit Status | Age at Enrollment | | | Total |
|---------------------------|---------------------------|----------------------------|----------------------------|-----------------------------|
| | 14 | 15 | 16 | |
| CERTIFICATE OF COMPLETION | 9 5.5% | 59 36.2% | 95 58.3% | 163 100.0% |
| HIGH SCHOOL DIPLOMA | 58 13.3% | 152 34.9% | 225 51.7% | 435 100.0% |
| Total | 67 11.2% | 211 35.3% | 320 53.5% | 598 100.0% |

Regarding disability as defined by OSEP classifications, significant differences were observed, Chi-square ($df = 12$, $n = 598$) = 107.380, $p < .001$. Several comparisons were based on very small group sizes and therefore should be interpreted with caution. While it is not possible to draw inferences where group sizes were small, there were noteworthy differences observed for disability classifications where group sizes were larger. This was the case for 'Autism', 'Emotional Disturbances', 'Intellectual Disability', 'Other Health Impairment' and 'Specific Learning Disability'. Descriptive statistics are shown in table 3 below. Shaded areas indicate higher percentages related to this significant finding.

Table 3: OSEP Disability Classifications

| OSEP Classifications | Exit Status | | Total |
|-------------------------|-------------|-------------|---------------|
| | Certificate | Diploma | |
| Autism | 41 33.9% | 80 66.1% | 121 100.0% |
| Deaf-Blindness | 3 33.3% | 6 66.7% | 9 100.0% |
| Deafness | 3 42.9% | 4 57.1% | 7 100.0% |
| Emotional Disturbances | 6 13.3% | 39 86.7% | 45 100.0% |
| Hearing Impairment | 0 0.0% | 5 100.0% | 5 100.0% |
| Intellectual Disability | 72 55.4% | 58 44.6% | 130 100.0% |
| Multiple Disabilities | 10 52.6% | 9 47.4% | 19 100.0% |
| Orthopedic Impairment | 4 28.6% | 10 71.4% | 14 100.0% |

| | Exit Status | | |
|-------------------------------|----------------------------|----------------------------|-----------------------------|
| | | | |
| Other Health Impairment | 12 9.8% | 111 90.2% | 123 100.0% |
| Specific Learning Disability | 11 10.9% | 90 89.1% | 101 100.0% |
| Speech or Language Impairment | 1 9.1% | 10 90.9% | 11 100.0% |
| Traumatic Brain Injury | 0 0.0% | 3 100.0% | 3 100.0% |
| Visual Impairment | 0 0.0% | 10 100.0% | 10 100.0% |
| Total | 163 27.3% | 435 72.7% | 598 100.0% |

Regarding disability as defined by five areas of 'Function', significant differences between the two groups were again observed, Chi-square (df = 4, n = 598) = 33.368, $p < .001$. This statistically significant finding reflects the fact that the score profile for four of the five 'Function' measures defines two different groups of individuals. Descriptive statistics related to these findings are included in Table 4 below. The shaded areas indicate the higher numbers and percentages for each of the four Functions that define the difference in these two profiles.

Table 4: 'Function' Classifications

| 'Function' Classifications | Exit Status | | |
|----------------------------|----------------------------|----------------------------|-----------------------------|
| | Certificate | Diploma | Total |
| Sensory | 7 16.7% | 35 83.3% | 42 100.0% |
| Cognitive/Intellectual | 83 35.5% | 151 64.5% | 234 100.0% |
| Affective/Emotional | 47 28.3% | 119 71.7% | 166 100.0% |
| Mobility/Health | 16 11.7% | 121 88.3% | 137 100.0% |
| Multiple | 10 52.6% | 9 47.4% | 19 100.0% |
| Total | 163 27.3% | 435 72.7% | 598 100.0% |

Comparisons of Services Received - Five CaPROMISE Core Service Areas

Diploma students received significantly greater numbers of interventions in two Core Service Areas: Financial Planning/Benefits Management and Career and Work-Based Learning. Certificate students received a significantly greater number of interventions for

the Core Service Area of Parent/Guardian Training and Information. Descriptive statistics related to these findings are included in Table 5 below. The shaded areas indicate the higher mean scores related to these three significant findings.

Table 5: Score Profiles - Five Core Service Areas

| Core Service Area | Group | n | Mean | t | p |
|--|--------------|----------|-------------|----------|----------|
| Case Management/Transition planning | Certificate | 163 | 75.36 | 1.676 | .094 |
| | Diploma | 435 | 81.53 | | |
| Financial Planning/Benefits Management | Certificate | 163 | 9.60 | 3.336 | .001 |
| | Diploma | 435 | 14.04 | | |
| Career and Work-Based Learning | Certificate | 163 | 32.69 | 4.935 | <.001 |
| | Diploma | 435 | 42.85 | | |
| Parent/Guardian Training and Information | Certificate | 163 | 22.96 | 1.978 | .048 |
| | Diploma | 435 | 18.90 | | |
| Other Services and Supports | Certificate | 163 | 31.18 | 1.709 | .076 |
| | Diploma | 435 | 35.02 | | |

Within the Core Service Area of Financial Planning/Benefits Management, Diploma students received a significantly greater number of interventions than did the Certificate students for three of the four specific interventions. Descriptive statistics related to these findings are included in Table 6 below. The shaded areas indicate the higher mean scores related to these three significant findings.

Table 6: Financial Planning/Benefits Management - 5 Specific Interventions

| Specific Intervention | Group | n | Mean | t | P |
|------------------------------|--------------|----------|-------------|----------|----------|
| Wage Reporting | Certificate | 163 | 2.48 | 1.602 | .110 |
| | Diploma | 435 | 3.02 | | |
| Work Incentives | Certificate | 163 | 2.07 | 2.464 | .014 |
| | Diploma | 435 | 2.84 | | |
| Benefits Planning | Certificate | 163 | 6.13 | 2.487 | .013 |
| | Diploma | 435 | 8.37 | | |
| Financial Planning | Certificate | 163 | 4.79 | 2.993 | .003 |
| | Diploma | 435 | 7.96 | | |

Within the Core Service Area of Career and Work-Based Learning, Diploma students received a significantly greater number of interventions than did the Certificate students for three of the six specific interventions. Descriptive statistics related to these findings are included in Table 7 below. The shaded areas indicate the higher mean scores related to these three significant findings.

Table 7: Career and Work-based Learning; Six Specific interventions

| Specific Intervention | Group | n | Mean | t | P |
|------------------------------|--------------|----------|-------------|----------|----------|
| | Certificate | 163 | 20.33 | 2.760 | .006 |

| Specific Intervention | Group | n | Mean | t | P |
|---------------------------------------|-------------|-----|-------|-------|-------|
| Employment Preparation Activities | Diploma | 435 | 24.63 | | |
| Career Related Training and Education | Certificate | 163 | 13.61 | 4.685 | <.001 |
| | Diploma | 435 | 20.90 | | |
| Volunteer Work | Certificate | 163 | 3.46 | .892 | .373 |
| | Diploma | 435 | 3.10 | | |
| Unpaid Work Experience | Certificate | 163 | 1.66 | .616 | .538 |
| | Diploma | 435 | 1.51 | | |
| Paid Work Experience | Certificate | 163 | 8.46 | 1.388 | .166 |
| | Diploma | 435 | 9.74 | | |
| Employment | Certificate | 163 | 4.69 | 4.893 | <.001 |
| | Diploma | 435 | 9.21 | | |

Within the Core Service Area of Parent/Guardian Training and Information, Certificate students received a greater average number of FRC Support interventions than did the Diploma students. Descriptive statistics related to these findings are included in Table 8 below. The shaded areas indicate the higher mean score related to this significant finding.

Table 8: Parent/Guardian Training and Information - Specific Interventions

| Specific Intervention | Group | n | Mean | t | P |
|-----------------------|-------------|-----|-------|-------|------|
| Referral | Certificate | 163 | 6.94 | 1.581 | .115 |
| | Diploma | 435 | 5.48 | | |
| Coaching | Certificate | 163 | 16.28 | 1.375 | .170 |
| | Diploma | 435 | 13.65 | | |
| FRC Support | Certificate | 163 | 6.33 | 3.180 | .002 |
| | Diploma | 435 | 4.36 | | |

Comparison of Completed Individual Career Action Plan (ICAP) Objectives

A significantly greater number of completed 'Education' and 'Other' ICAP objectives were recorded for Diploma students. Descriptive statistics related to these findings are included in Table 9 below. The shaded areas indicate the higher mean scores related to these two significant findings.

Table 9: Completed ICAP Objectives

| Completed ICAP Objective | group | n | Mean | t | P |
|--------------------------|-------------|-----|------|-------|-------|
| Education | Certificate | 163 | .73 | 4.072 | <.001 |
| | Diploma | 435 | 1.16 | | |
| Employment | Certificate | 163 | .95 | 1.797 | .073 |
| | Diploma | 435 | 1.17 | | |
| Benefits | Certificate | 163 | .36 | 1.677 | .094 |
| | Diploma | 435 | .48 | | |

| Completed ICAP Objective | group | n | Mean | t | P |
|--------------------------|-------------|-----|------|-------|------|
| Other | Certificate | 163 | .29 | 2.547 | .011 |
| | Diploma | 435 | .49 | | |

Parent/Guardian Concerns Recorded at Time of Intake

Two areas of potential parent/guardian expressed concerns that were captured in the DMS at intake reflected differences between the Certificate and Diploma student groups. A significantly higher percentage of Certificate students' parents/guardians indicated this concern, Chi-square (df = 1, n = 598) = 28.154, $p < .001$. Descriptive data related to this finding are shown in Table 10 below. The shaded areas indicate the larger percentages related to this significant finding.

Table 10: Parent/Guardian Concern; Students' Safety

| Group | | No | Yes | Total |
|-------------|---|-------|-------|--------|
| Certificate | n | 84 | 79 | 163 |
| | % | 51.5% | 48.5% | 100.0% |
| Diploma | n | 323 | 112 | 435 |
| | % | 74.3% | 25.7% | 100.0% |
| Total | n | 407 | 191 | 598 |
| | % | 68.1% | 31.9% | 100.0% |

A second parent/guardian concern was their stated belief that their students would not be able to work independently. A significantly higher percentage of Certificate students' parents/guardians indicated this concern, Chi-square (df = 1, n = 598) = 55.540, $p < .001$. Descriptive data related to this finding are shown in Table 11 below. The shaded areas indicate the larger percentages related to this significant finding.

Table 11: Parent/Guardian Concern Students' Ability to Work Independently

| Group | | No | Yes | Total |
|-------------|---|-------|-------|--------|
| Certificate | n | 93 | 70 | 163 |
| | % | 57.1% | 42.9% | 100.0% |
| Diploma | n | 372 | 63 | 435 |
| | % | 85.5% | 14.5% | 100.0% |
| Total | n | 465 | 133 | 598 |
| | % | 77.8% | 22.2% | 100.0% |

Expressed Expectations – Employment and Post-Secondary Education

Students and their parents/guardians were asked to state their expectations regarding plans after high school graduation, i.e., employment and college attendance.

Significant differences were noted. Regarding student expressed expectations about employment after high school graduation, a significantly higher percentage of Certificate students stated 'no', Chi-square (df = 1, n = 598) = 5.532, p = .019. Descriptive statistics related to this finding appear in Table 12 below. The shaded area indicates the larger percentage related to this significant finding.

Table 12: Student Stated Expectations - Employment After High School

| Group | | No | Yes | Total |
|--------------|----------|--------------|--------------|---------------|
| Certificate | n | 76 | 87 | 163 |
| | % | 46.6% | 53.4% | 100.0% |
| Diploma | n | 157 | 278 | 435 |
| | % | 36.1% | 63.9% | 100.0% |
| Total | n | 233 | 365 | 598 |
| | % | 39.0% | 61.0% | 100.0% |

Regarding student expressed expectations about college attendance after high school graduation, a significantly higher percentage of Certificate students indicated 'no', Chi-square (df = 1, n = 598) = 113.294, p<.001. Descriptive statistics related to this finding appear in Table 13 below. The shaded areas indicate the larger percentage related to this significant finding.

Table 13: Student Stated Expectations - College Attendance

| Group | | No | Yes | Total |
|--------------|----------|--------------|--------------|---------------|
| Certificate | n | 104 | 59 | 163 |
| | % | 63.8% | 36.2% | 100.0% |
| Diploma | n | 81 | 354 | 435 |
| | % | 18.6% | 81.4% | 100.0% |
| Total | n | 185 | 413 | 598 |
| | % | 30.9% | 69.1% | 100.0% |

Regarding parent/guardian expressed expectations about college attendance after high school graduation, a significantly higher percentage of the Certificate students' parents/guardians indicated 'no', Chi-square (df = 1, n = 598) = 117.552, p<.001. Descriptive statistics related to this finding appear in Table 14 below. The shaded areas indicate the larger percentage related to this significant finding.

Table 14: Parent/Guardian Stated Expectations; College Attendance

| Group | | No | Yes | Total |
|--------------|----------|--------------|--------------|---------------|
| Certificate | n | 97 | 66 | 163 |
| | % | 59.5% | 40.5% | 100.0% |
| Diploma | n | 66 | 369 | 435 |
| | % | 15.2% | 84.8% | 100.0% |
| Total | n | 163 | 435 | 598 |
| | % | 27.3% | 72.7% | 100.0% |

Summary of Certificate and Diploma students

This report documented several differences between the diploma and certificate groups of students, based on DMS data. The differences pointed to demographic as well as service delivery data for the students and their parents/guardians. Several additional analyses of DMS data were conducted, but they were not included in the report because they did not produce significant findings. It is recommended that CaPROMISE staff review these findings and suggest other analyses that might prove to be relevant to this study in further defining these two groups.

The findings present a picture of two different groups in terms of the menus of services they received. It cannot be determined from this inquiry alone what dictated the content of those menus. Were the demographic characteristics of students and their parents/guardians a causal factor regarding CSC service delivery decisions? Did the two different 'tracks' – 'Diploma' and 'Certificate' – impose an early bias pertaining to service delivery decisions? Is there a programmatic bias that differentially treats students as they, their families and their CSCs strive to attain CaPROMISE Project objectives? In order to address these and related questions, it is recommended that follow-up inquiries be conducted.