Higher Education Quality Council of Ontario

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# Understanding the STEM Path through High School and into University Programs – Appendix

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# Appendix

**Table A-1: Ministry of Education Grade 9 Cohort Data Exclusions**

| | Number | % |
|---|---|---|
| Initial Sample | 171,813 | |
| Born prior to 1990 or after 1992 | 5,143 | 3% |
| Enrolled in less than three courses in 2005/2006 | 19,594 | 11% |
| From special or small (<25 Grade 9 students) high school | 790 | 0% |
| No grades in either Level 1 math or English/French. | 7,413 | 4% |
| Enrolled in an average of less than 3 courses per year in 2006/2007, 2007/2008 and 2008/2009 and no high school diploma. This includes students with no record in those years. | 3,566 | 2% |
| Total exclusions | 36,506 | 21% |
| Final estimation sample | 135,307 | |

**Table A-2: OUAC Data Exclusions**

| **Original sample size (2004 through 2012)** | **750,823** | |
|---|---|---|
| Those with Fewer than four Level 4 university or mixed high school courses | 10,099 | 1% |
| Those With No University Choices | 1,497 | 0% |
| Those with Invalid Postal Codes or Missing Postal codes | 2972 | 0% |
| Those with courses from pre-double cohort curriculum | 10,392 | 1% |
| Those who attended an atypical high school (prison, aboriginal, etc.) | 8,782 | 1% |
| Those who applied beyond age 20. In most circumstances should be a 105 application. | 7,871 | 1% |
| High school cohort was ever less than 20 students / high school data missing | 61,177 | 8% |
| Total exclusions | 102,790 | 14% |
| Final estimation sample | 648,033 | |
| *Authors' calculations | | |

**Figure 1: Difference in Likelihood of Passing Academic/Mixed/University Math in Table 2 (Comparison group is No AUM Math in prior level or grade of 59% or less)**

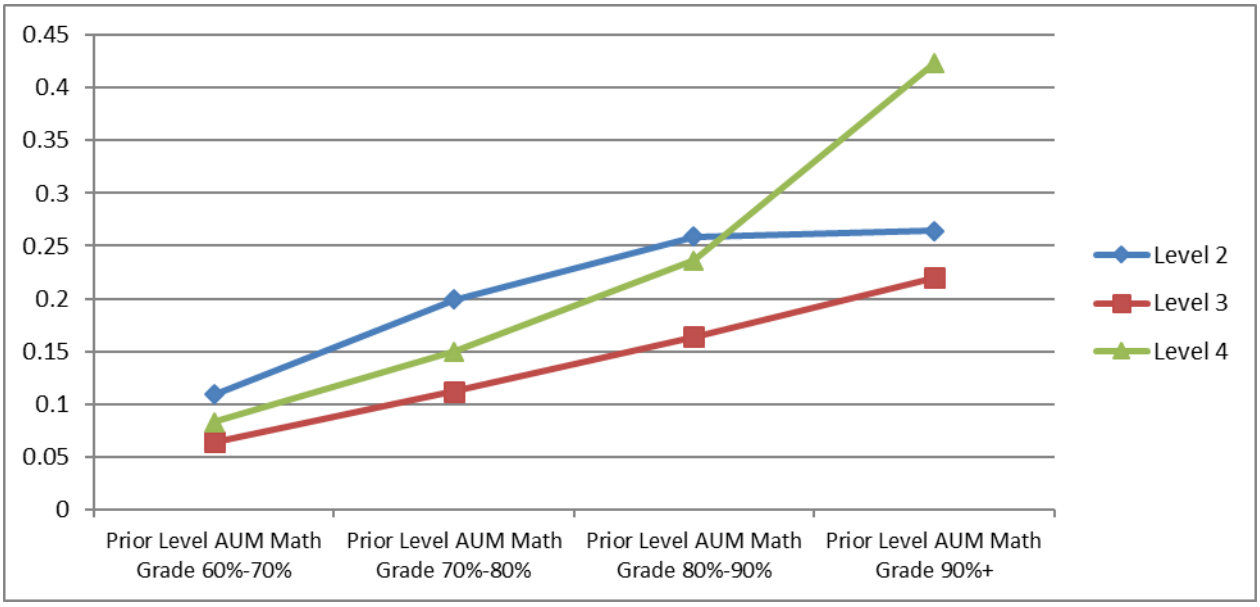



**Figure 2: Difference in Likelihood of Passing Academic/Mixed/University Science in Table 2 (Comparison group is No AUM Science in prior level or grade of 59% or less)**

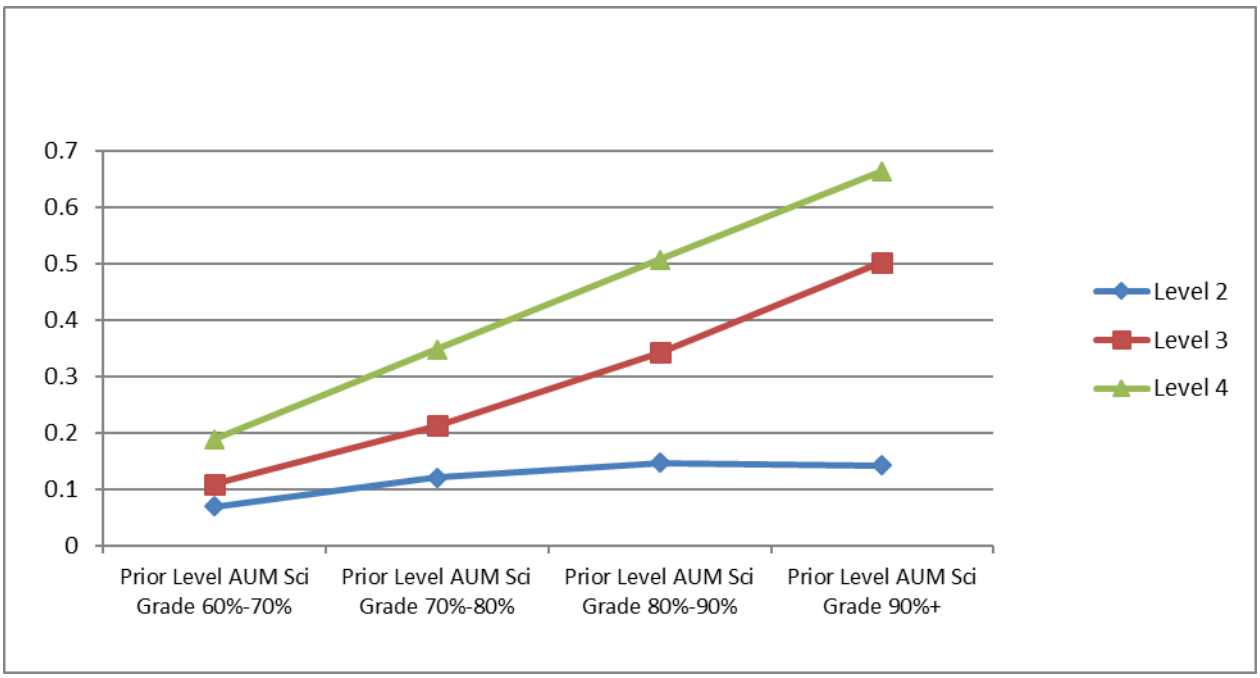
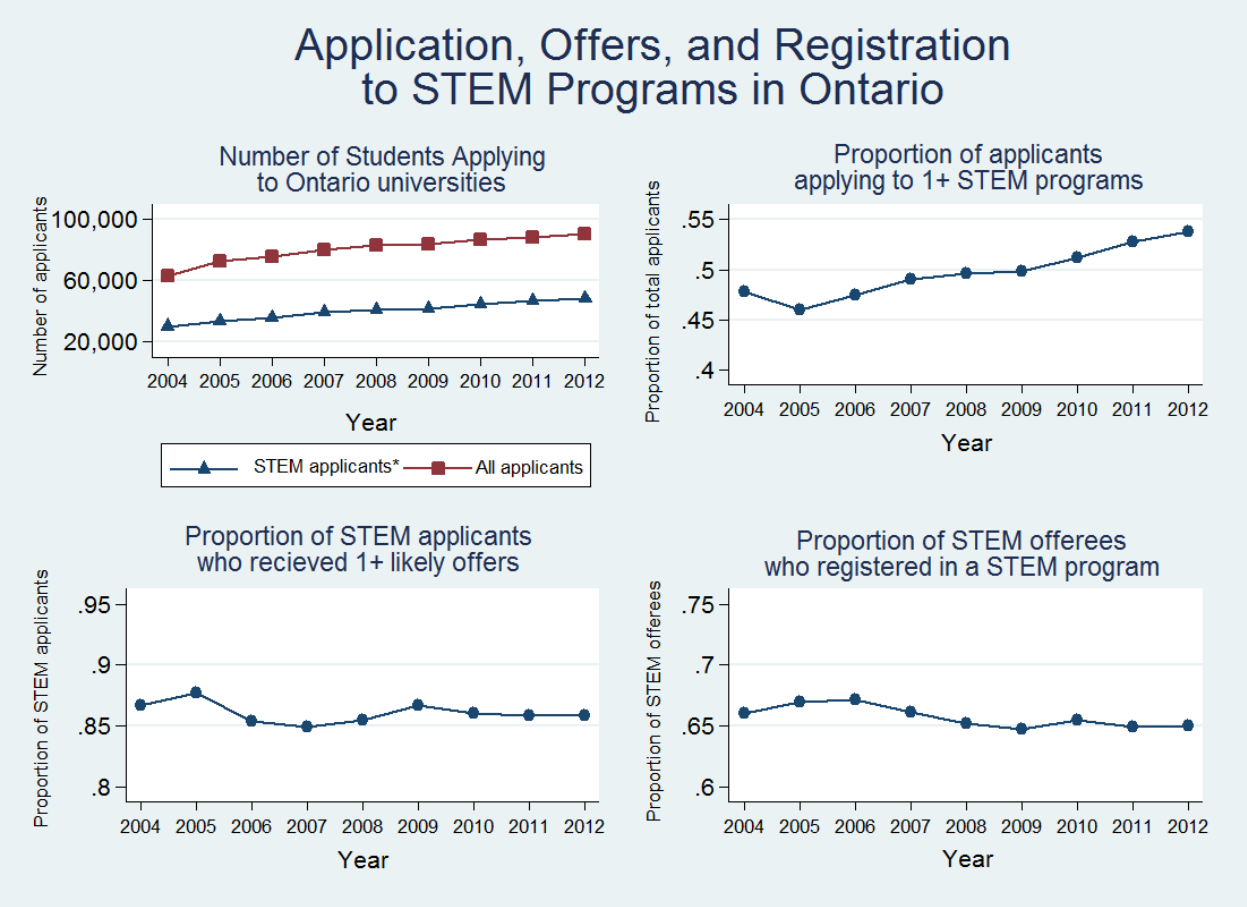


**Figure 3: Application, Offers and Registrations to STEM Programs in Ontario**




* Authors' calculations

**Figure 4: Difference in Likelihood of Applying to a University STEM Program by Level 4 University/Mixed Science GPA and Number of Level 4 University/Mixed Science Courses in Table 4**

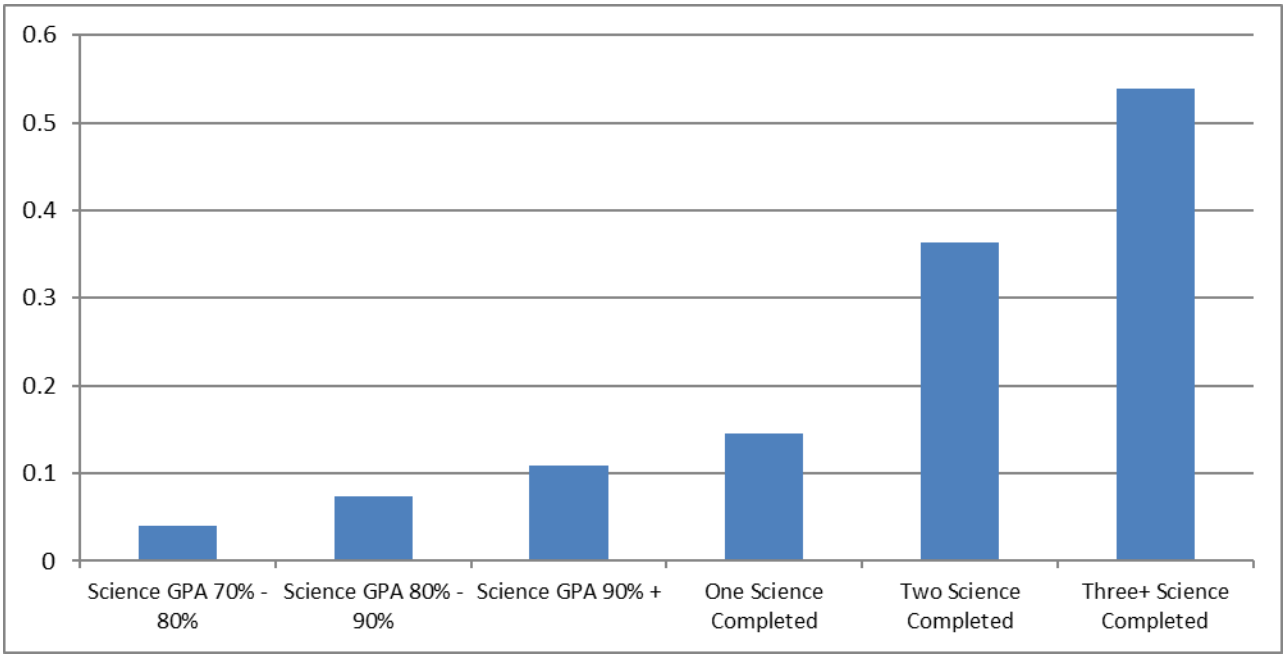
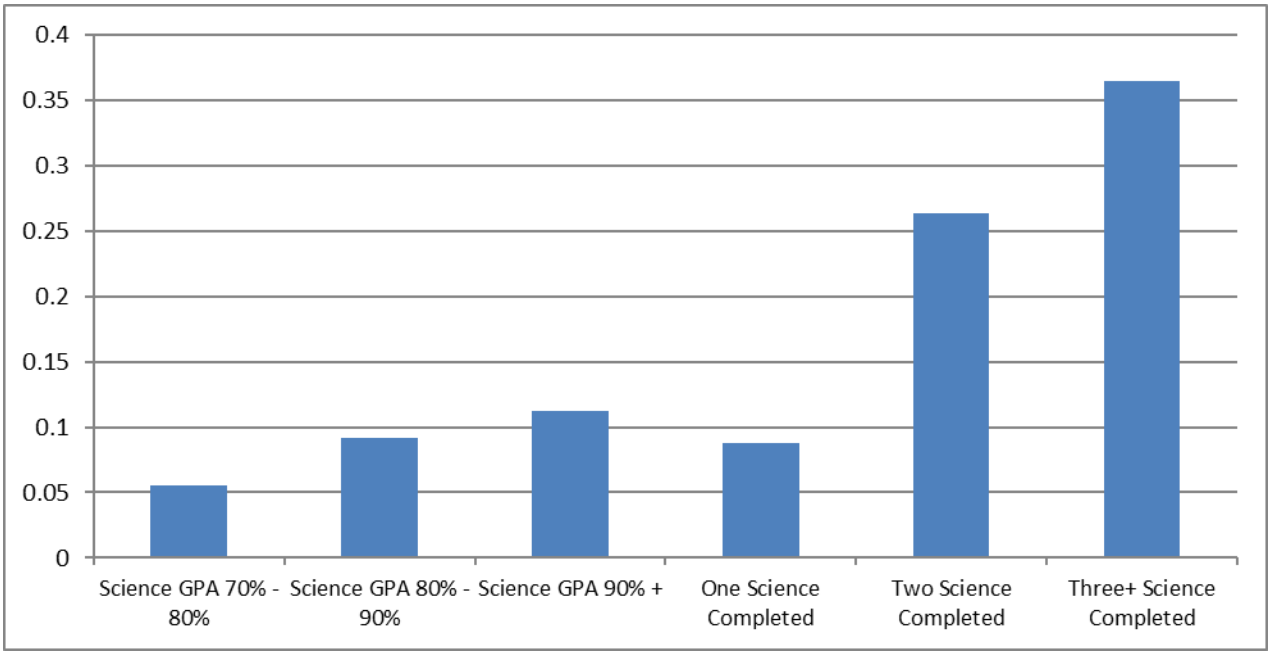



**Figure 5: Difference in Likelihood of Registering in a University STEM Program by Level 4 University/Mixed Science GPA and Number of Level 4 University/Mixed Science Courses in Table 4**



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