## **No Credential?**

# Post-Secondary Participation and Life Activity Patterns of the Class of '88

A Report from the Paths on Life's Way Project

Prepared by Lesley Andres
June 2013



Research by



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### No Credential? Post-Secondary Participation and Life Activity Patterns of the Class of '88

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#### Introduction

Why do individuals invest in post-secondary studies but never complete any form of post-secondary credential? Why do some individuals never attend at all? There is a perception that an unacceptably high proportion of high school graduates do not complete their post-secondary studies. For example, UBC VP Finance Pierre Ouillet (2013), in discussing the need for blended learning to enhance access and participation asserted that "this is a big deal here in BC where the 57 per cent post-secondary graduation rate is behind the Canadian average." Post-secondary completion figures such as these are often calculated over a short time span which is further compounded by employing data that do not extend past institutional and provincial boundaries.

When post-secondary participation patterns are examined over the long term, a more complete picture emerges. The *Paths on Life's Way* data<sup>2</sup> allows for an extensive examination of post-secondary and other life course participation patterns over the long term. The *Paths on Life's Way* project is the only longitudinal data base of its kind in British Columbia that follows a sample of high school graduates over 22 years. Using *Paths* data, Andres & Offerhaus (2012) demonstrated that 20% of *Paths* respondents did not attend any post-secondary institution directly out of high school in 1988-1989. Within five years following high school graduation (by 1993), however, only 7% remained non-attendees. By 2010, only 3% remained *never attendees* over the entire 22 year period.

In our most recent research report (Andres & Offerhaus, 2013<sup>3</sup>), we looked at the relationships among post-secondary participation and other life course activities such as work, unemployment, and "other" activities. Now I turn my attention to post-secondary non-completers.

I begin with a breakdown of post-secondary participation over 22 years by gender and post-secondary completion status<sup>4</sup> (Figures 1 and 2). As in our other most recent reports, I use the technique of sequence analysis which allows for the examination of all the elements in a sequence simultaneously. These findings are supplemented with cross-tabulations of income.

<sup>&</sup>lt;sup>1</sup> www.publicaffairs.ubc.ca/2012/12/18/cloud-u-ubc-ventures-boldly-into-the-virtual-university/

<sup>&</sup>lt;sup>2</sup> Details of the *Paths* project can be found at the <u>Paths on Life's Way Project</u> website: <u>blogs.ubc.ca/paths/</u>

<sup>&</sup>lt;sup>3</sup> Customized Lives? Multiple Life Course Activities of the Class of '88 Over 22 Years; available at <a href="https://doi.org/bc/bc/22-years-out">bccat.ca/publications/research/paths/22-years-out</a>

<sup>&</sup>lt;sup>4</sup> Please refer to Andres & Offerhaus (2012) for a description of the sample, a description of the institutions, and a primer in reading sequence analysis graphs. Also available at <a href="bccat.ca/publications/research/paths/22-years-out">bccat.ca/publications/research/paths/22-years-out</a>

#### Highlights

- Only 3% of *Paths* respondents remained post-secondary never-attendees over 22 years.
- Non-completers were less likely than completers to attend post-secondary institutions directly out
  of high school.
- Post-secondary attendance patterns of male non-completers are similar to those of male university graduates. The patterns for female non-completers are more complicated.
- Non-completers were less likely than completers to participate in any kind of post-secondary study after the first four or five years out of high school.

Details of the *Paths* project can be found at the <u>Paths on Life's Way Project</u> website. http://blogs.ubc.ca/paths/

#### Post-secondary Participation, 1988 – 2010

Each type of institution attended – for example community college – is considered a "state." Preliminary analyses revealed 16 different states experienced by *Paths* respondents. For ease of interpretation, those who simultaneously attended more than one institution in a given year have been collapsed into one category, labeled "combination of several institutions." In the analyses employed here, eight different states used are portrayed in Figure 1.

<sup>&</sup>lt;sup>5</sup> Combinations include community college + university-college; community college + technical/vocational institution; community college + university; community college + private institution; university-college + technical/vocational training institute; university-college + university; university-college + private institution; technical/vocational training institute + university; technical/vocational training institute + private institution; and university + private institution. Three or four cases where more than two institutions were attended in given survey years were collapsed into attending multiple institutions and were not included in the combinations listed here.

**Figure 1. Institutional States** 



Each row in the figures below represents a respondent. Colours, as defined in Figure 1, indicate enrolment in some type of post-secondary institution. More colour indicates more enrolment while gray portrays non-attendance.

In each of the analyses below, those who have remained post-secondary non-completers are examined in relation to those who have completed non-baccalaureate credentials and baccalaureate credentials. All analyses are conducted by gender.

#### Post-secondary Participation, 1988 – 2010

It is obvious in Figures 2.a. and 2.b. that those who have never completed any post-secondary credential since graduating from high school in 1988 simply have not attended post-secondary institutions at the same rate as those who have earned credentials. When compared with these other two groups, more women and men did not enrol in post-secondary studies directly out of high school. Immediate entry to post-secondary education seems to be a useful predictor of subsequent studies in that at least half of those who did not enrol in post-secondary studies directly out of high school, never did so during their entire adult lives.

Figure 2.a. Post-secondary Participation, 1988 – 2010, Females

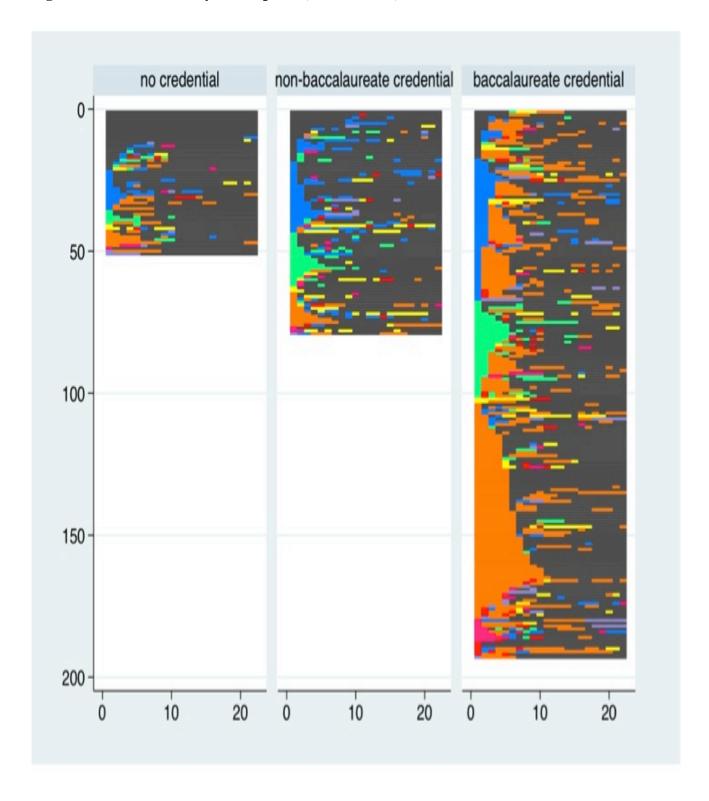
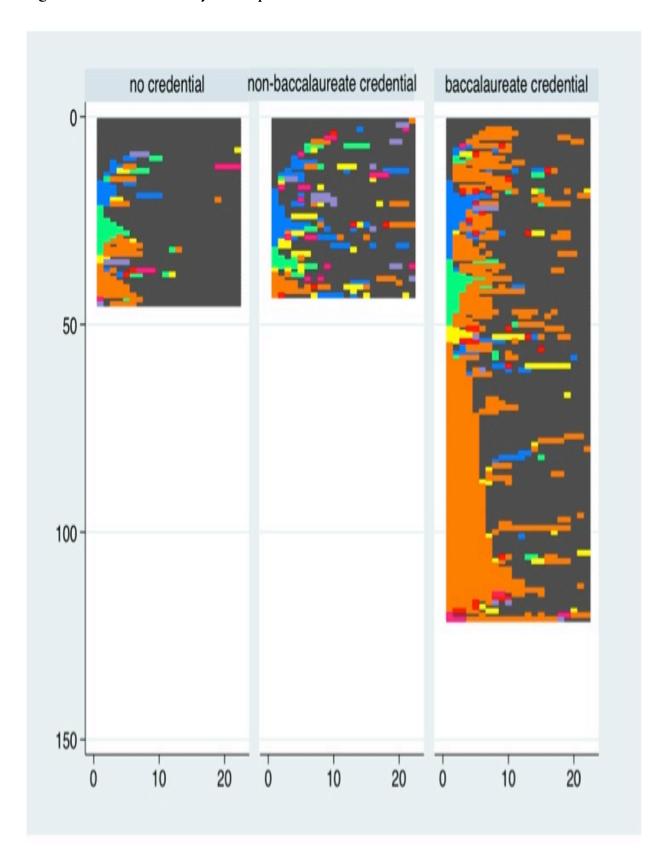


Figure 2.b. Post-secondary Participation, 1988 – 2010, Males



Yet, Figures 2.a. and 2.b. also reveal that there was considerable post-secondary participation activity by the non-completer group. A minority delayed entry and participated in a variety of ways over several years. The majority, however, commenced studies directly out of high school, either in community colleges, university colleges, or universities. Some respondents transferred from university college or community college to university and most continued their studies for several years. Overall, women participate more than men; that is, there are fewer periods of non-attendance (depicted by dark grey), whereas men demonstrate more continuous participation with less interruption between years. These findings suggest that commencing post-secondary studies directly out of high school does appear to make a difference in terms of ever attending post-secondary studies.

#### Life Course Activities, 1988-2010

In this section, the focus is switched to life course activities from September 1988 to March 2010. Information reported monthly (i.e., at 259 time points) on post-secondary education, employment, unemployment, and "other" activities are employed. Each type of life course activity is considered a "state." Individuals could have participated in more than one state at a given time (e.g., full-time post-secondary education and part-time work); however, because each state must be mutually exclusive, the categories are collapsed into eight different states, as portrayed in Figure 3 (see Andres & Offerhaus, 2013). Again, the story is told through the intensity and continuity of the colour patterns.

Figure 3. Life Course Activity States

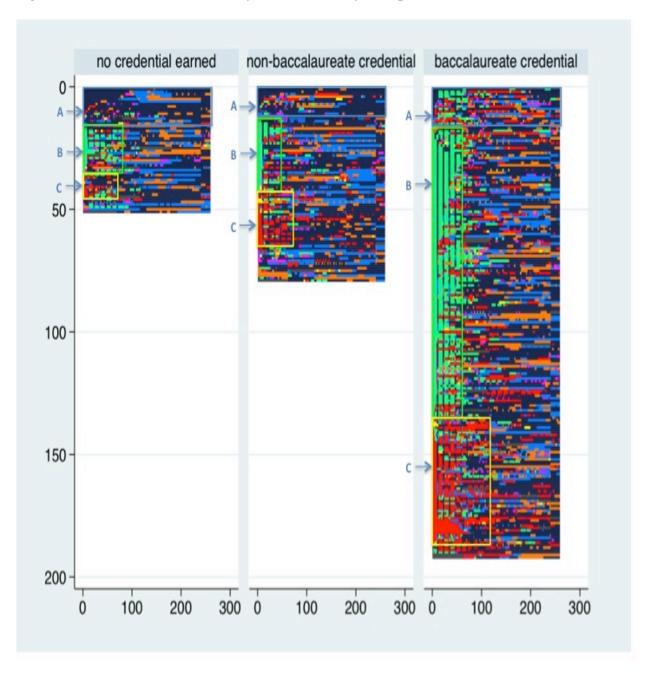


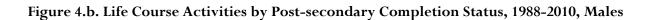
#### Life Course Activities by Post-secondary Completion Status, 1988-2010

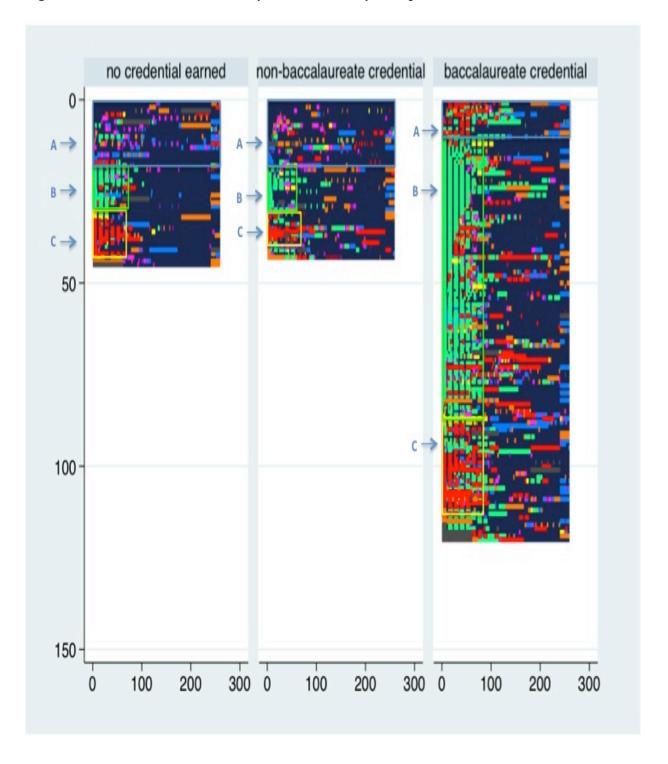
Figures 4.a. and 4.b.are divided into three main categories: A – those who commenced work directly out of high school; B – those who studied full-time directly out of high school; and C – those who either combined study and work or studied part-time only directly out of high school.

Approximately equal proportions of non-completers and those who earned baccalaureate credentials worked for one or more months from September 1988 on (1988 summer employment is excluded from these analyses) (A). However, by 1989 those who completed baccalaureate level studies were participating in post-secondary studies either full-time or in combination with work. Figures 4.a. and 4.b. demonstrate that non-completers in this group – particularly the men – were more likely to be unemployed than to participate in post-secondary studies.

Figure 4.a. Life Course Activities by Post-secondary Completion Status, 1988-2010, Females







Non-completers who began their studies full-time in September 1988 resembled baccalaureate graduates more than those who have earned non-baccalaureate credentials (B). That is, they have participated for four or more consecutive years full-time; during this time, few combined work and study.

Non-completers who commenced their studies while working simultaneously are more similar to the non-baccalaureate completers than the baccalaureate completers (C). Unlike the baccalaureate completer group who combined study and work, participation patterns of non-completers resembles a funnel of attrition over four to five years. A few women, but not men, shifted from a combination of study and work to full-time study.

Unlike the other two groups, non-completers were not likely to participate in any kind of post-secondary study after the first four or five years out of high school. Female non-completers who commenced their studies full time were as likely to work part-time as full time. Women who worked (A) or combined study and work directly out of high school (C) were more likely to work full-time in the long run. This pattern is similar to the non-baccalaureate completers. Male non-completers worked almost exclusively full-time. However, since late 2009 and coinciding with the global financial crisis, more men reported working part-time.

#### Life Course Activities by Post-secondary Completion Status Retrospectively, 2010-1988

In Figures 5.a. and 5.b., the analysis of month-by-month data over 22 years are conducted retrospectively. That is, I have commenced the analysis from March 2010 to September 1988 to demonstrate the most recent activities of *Paths* respondents and the routes that led them to their most recently recorded activities.

The analyses in Figures 5.a. and 5.b. are divided into five categories: those who have been employed full time continuously for more than half of their adult lives (A); those who do not fit into category A but were employed full-time as of March 2010 (B); those who were employed part-time as of March 2010 (C); those who were studying as of March 2010 (D); and those who were engaged in "other" activities (E).

As of March 2010, just over half of both female and male non-completers were employed full-time. When compared to men, few women non-completers fall into Category A (extensive continuous full-time employment). Also, post-secondary participation patterns in Category A differ strongly by gender in terms of initial studies. Women with a long history of continuous full-time employment show little evidence of post-secondary participation in the early years directly out of high school. The small amount of full-time educational participation occurred later at around five years out of high school. Conversely, the vast majority of men in Category A demonstrate continuous post-secondary participation for four to six years.

Category B (working full-time in 2010 but with a fragmented employment history) is an eclectic category. It is comprised of multiple life course activities including primarily full- and part-time work, full-time study, study while working, and unemployment, particularly for women. More women than men belong to Category B. As of March 2010 both women and men in Category B were employed full-time, but the trajectories differ by gender. For women, the paths are varied. For men, there are some disruptions in full-time employment, but full-time employment prevails with participation in post-secondary education as the dominant pattern in the early years.

Those in Category C were employed part-time as of March 2010. Again for men in this category, up until the last few years, full-time work was the dominant category and participation in post-secondary education was the pattern in the early years. For women, part-time employment across the years was more extensive. In the early years, some women studied and others were engaged in "other" activities or were unemployed.

Figure 5.a. Life Course Activities by Post-secondary Completion Status Retrospectively, 2010-1988, Females

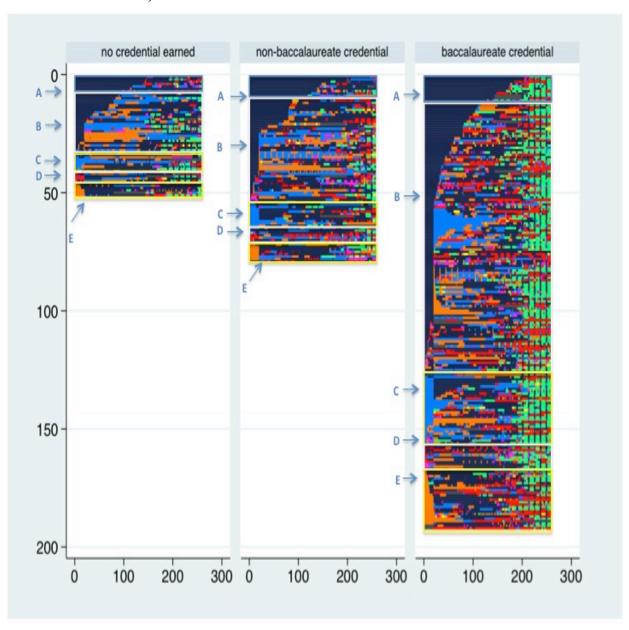
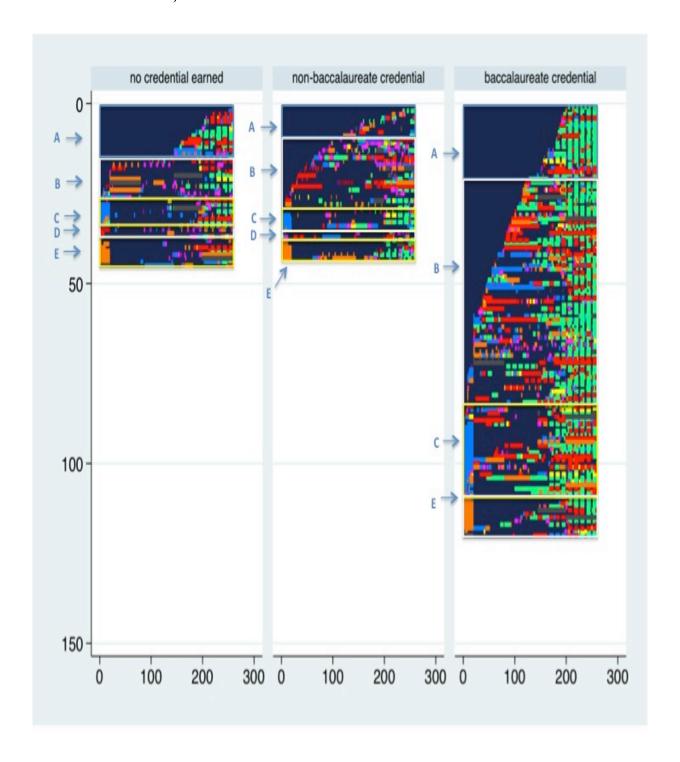


Figure 6.b. Life Course Activities by Post-secondary Completion Status Retrospectively, 2010-1988, Males



As Category D (studying) reveals, only a very small proportion of non-completers were studying in March 2010. All appear to have done so while working. Almost all of the men in this category appear to have never studied before. Women in Category D studied primarily between 1988 and 1993.

Finally, Category E is comprised of those who were engaged in "other" activities in March 2010. Women and men in this category, for the most part, worked full-time in previous years.

#### Median Monthly Salaries, 1993-2010

In Table 1, median monthly salaries are portrayed. Over the years, the income gap remained small between post-secondary non-completers and non-baccalaureate completers, but substantial between baccalaureate completers and the other two groups. In 1993, female non-completers earned less than female non-baccalaureate and baccalaureate completers. By 1998, the monthly median incomes of female non-completers surpassed those of non-baccalaureate completers; baccalaureate completers had a small income advantage over the other two groups. This pattern held in 2003. By 2010, those with completed post-secondary credentials had higher median monthly earnings than non-completers with baccalaureate completers earning a median of \$1000 more per month.

Table 1. Median Monthly Salary by 2010 Post-secondary Completion Status and Gender

	Non-			
	Non- completers	baccalaureate completers	Baccalaureate completers	
	\$	\$	\$	
emales				
1993	1500	1800	1650	
1998	2180	2000	2625	
2003	3500	3200	4075	
2010	4779	4928	5896	
<b>S</b> ales				
1993	2350	2490	1900	
1998	3301	2800	3600	
2003	4950	4600	5500	
2010	7000	6720	8512	

Although median salaries are higher at every educational level and year for men, the pattern of income differentials is similar to female *Paths* respondents. Male non-completers started out in 1993 with relatively high salaries which were comparable to non-baccalaureate completers and higher than baccalaureate completers. By 1998, the median salaries of baccalaureate completers overtook both of the other groups, but non-completers' median salaries remained higher than those of non-baccalaureate completers. This pattern held in 2003 and 2010. These findings may be the result of sample bias in that it is possible that only financially successful non-completers tended to remain in the study.

The gender gap across all post-secondary completion categories is substantial. The gap between median salaries of non-completers and baccalaureate completers was \$1512 which is around 1.5 times higher than the gap between female non-completers and baccalaureate completers. It is noteworthy that men who had

never completed post-secondary studies reported earning higher median incomes in 2010 than did female baccalaureate completers.

#### Conclusion

As the findings in this report reveal, post-secondary non-completers are not a homogeneous group. Only a tiny proportion of respondents (2% of women and 4% of men) to all waves of the *Paths on Life's Way* project remained *never attendees*. A somewhat larger proportion (13% of women and 17% of men) commenced post-secondary studies at some time between 1988 and 2010 but did not earn any credential.

Should non-completers be encouraged to complete their post-secondary studies? As demonstrated in this report, the vast majority of non-completers did attend post-secondary institutions and a substantial proportion invested many years in their studies. This suggests that they were interested, at least for a time, in completing post-secondary credentials. Further analyses of the *Paths* data are required to reveal the reasons why respondents' did not complete their studies and to determine the extent of personal and financial well-being they report in relation to the other groups.

One vulnerable group appears to be those who did not attend post-secondary education directly out of high school. Incentives to encourage enrolment for at least one semester of post-secondary education within the first 12 months following high school may reduce the proportion of individuals who never attend or do not complete their studies. The rationale for this recommendation is that about half of those in the non-completion category who did not commence studies directly out of high school never did attend a post-secondary institution. In comparison, a similar proportion of those who did not attend a post-secondary institution in September 1988 did eventually complete university degrees. Analyses of background characteristics and high school curricular differentiation and GPAs may reveal important differences between these two groups.

Male non-completers appear to invest heavily in post-secondary education by attending directly out of high school and studying for several consecutive years. Are they lured into high paying and/or demanding employment and simply never get around to completing their studies? Does degree completion become irrelevant? Post-secondary alumni associations might like to direct some attention to those who begin but never finish their post-secondary studies.

The picture for women is more complicated. Post-secondary participation in the early years was not as consistent as it was for male non-completers. For women, childbearing and family responsibilities may have disrupted commencement or completion of post-secondary studies. Seventeen percent of female and 14% of male non-completers had children by 1993 (five years out of high school). By 1998, this proportion had increased to 35% and 28%, respectively. In comparison, only 1% of female and none of the male university graduates had children by 1993; by 1998 this proportion had increased to 18% and 8%, respectively. Accommodating students – particularly females – with children is an ongoing challenge.

As the figures in this summary (and the full report) demonstrate, the non-completion rate would be much higher for all post-secondary completion groups if the cut-off point under consideration were, 5, 10, or even 15 years out of high school. In other words, *Paths* respondents continue to study across the life course and not only in their twenties. They are aided in doing so by seamless post-secondary systems such as that of British Columbia. Only longitudinal studies can capture such dynamics.