Transitions Longitudinal Study

6th Annual Report to the Ministry of Training, Colleges and Universities

June 2010



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The *Transitions* longitudinal study exists only because of the work of the Learning Opportunities Task Force. Between 1998 and 2002, LOTF revolutionized services and programs for students with learning disabilities at ten post-secondary pilot institutions. The core of the pilot programs has since been replicated at all colleges and universities in Ontario. As such, the legacy of LOTF exists in the fact that Ontario provides the most comprehensive support for post-secondary students with learning disabilities in the world. *Transitions* will help to test the efficacy of this statement as the study unfolds over the next decade.

The province of Ontario owes a debt of gratitude to Dr. Bette Stephenson, who was a passionate and active Chairman to the task force. Great expertise and commitment was exemplified by Eva Nichols, who acted as Senior Consultant to the Chair.

This acknowledgement would not be complete without paying tribute to two other individuals who served LOTF. Bonnie Tiffin was a capable Executive Coordinator for the Richmond Hill office, and Dr. Laura Weintraub was an impassioned consultant to LOTF until her untimely death in January, 2004.

EXECUTIVE SUMMARY

"I have found a job in an area I didn't think I could do. Numbers and I never got along very well. It is really satisfying to know I can do it!" - An enthusiastic Transitions participant

After six years of the *Transitions* Longitudinal Study, our participants continue to graduate, work, and make progress with their careers and relationships. As has been said, but really can never be said enough, this level of success would have been considered impossible for a group of adults with learning disabilities as recently as 20 years ago. Even more recently, in 2007, the Learning Disabilities Association of Canada published a comprehensive report, which presented an alarming profile of Canadians with learning disabilities. In the report, youth and adults with learning disabilities were shown to have high rates of depression, distress, anxiety disorders, and poor physical health. In addition, they were shown to have low educational and employment attainment compared to the general population.

It is the *Transitions* team's contention that this huge difference between the LDAC profile and our *Transitions* cohort is directly related to post-secondary educational attainment. We think it very likely that our *Transitions* Trends--refined from year to year, survey to survey--will allow us to establish this contention as a central study finding at the end of ten years.

This year there have been a number of *Transitions* highlights. Most note-worthy, we have been able to dramatically reverse the normal course of survey attrition, endemic to longitudinal studies, going from 93 participants last year to 123 participants for the 6th Annual Report. This new figure is even higher than the 119 participants we had two years earlier. As a testament to our *Transitions* participants, it is worth mentioning that without exception, once we were able to locate people after long hours of trying, they were glad to rejoin the *Transitions* family.

Our participants are busy, with 42 having graduated from two different postsecondary programs. Our female participants are no longer experiencing higher rates of unemployment than their male *Transitions* peers. *Transitions* people continue to impress with high rates of volunteerism and a rate of engagement in physical activity twice the general population average. Perhaps most impressive are trends related to employment with an all time high of 93% participants reporting having good relationships with their coworkers, 80% of participants reporting being prepared to seek work, and 74% indicating satisfaction with their jobs. That 44% of participants report being held back in their lives by debt is a trend of concern. And although 78% report being able to manage their learning disability well, this figure is lower than the high of 90% in 2008, and therefore a trend worthy of monitoring as we move forward.

Though more difficult to establish as a study finding, we further think that the fundamental reason behind our cohort's success is because the LOTF supports that they received as pilot students placed a great deal of emphasis on developing **resiliency**. From it conception, the

primary *Transitions* research question has been to ask what really works, not just for the time of one's post-secondary education, but what really allows one to transform one's life and not fall into the pattern outlined in the LDAC report.

Did the post-secondary pilot supports accommodate a student's learning disability in a manner specific to the educational environment, or did the supports teach transferable skills and personal resiliency in a way that allows for former pilot students to take control of and change their own lives?

With this theme of resiliency in mind, let's look at a synopsis of this year's *Transitions* Trends:

The 2009 profile of *Transitions* Trends:

Transitions Trend #1: Participants place a high value on post-secondary education. (Continuing Trend)

In 2009, *Transitions* participants continue a strong educational trend with 29 (24%) participants still enrolled in post-secondary programs. Most impressive, 11 of our participants have graduated from three different programs, and 42 have graduated from two different programs.

Transitions Trend # 2: Transitions participants have a higher than average retention rate than the general population in post-secondary education. (Continuing Trend)

In the general population, 15% of post-secondary students leave their program without graduating. In 2009, only 11 (9%) of our *Transitions* cohort left their program without graduating.

Transitions Trend # 3: Transitions PSE Leavers cite inability to pass required courses as the most common reason for not graduating. (Continuing Trend)

In 2009, there were eight participants who reported not being able to pass their required courses. Though the number is not large, being able pass required courses was a LOTF benchmark for success and is considered important.

Transitions Trend # 4: Transitions participants combine post-secondary education and work reasonable well. (Continuing Trend)

In 2009, 25 of 29 (89%) participants who are currently studying are also working. This figure is higher than all previous years except for last year when all students combined work and study.

Transitions Trend # 5: A high percentage of Transitions participants are living with their parents or other family members. (Continuing Trend)

The percentage of *Transitions* participants living at home is 27%, down from 30% last year, as compared to 20% of similar age in the general population.

Transitions Trend # 6: Financial concerns are impacting on Transitions participants' life decisions. (Continuing Trend)

In 2009, 44% of participants report that their student debt prevents them from enjoying the lifestyle they want, compared to 38% in 2008.

Transitions Trend # 7: The majority of Transitions participants, upon graduation, feel prepared to seek employment. (Continuing Trend)

In 2008, 69% of participants felt prepared to seek employment, and this year that figure has gone up to 80%.

Transitions Trend # 8: Transitions participants have lower salaries and are underemployed compared to the general population. (Continuing Trend)

By a small margin in 2009, we must continue this trend since 13%-15% of participants earn less than \$20,000 annually.

Transitions Trend # 9: Compared to other Ontario residents aged 22-29 with learning disabilities, Transitions participants have a high rate of employment and good salaries. (Continuing Trend)

The LDAC report on learning disabilities notes that 41.2 % of persons with learning disabilities of similar age are unemployed, and 26.3% only earn between \$1-999 annually. In 2009, 80% of *Transitions* participants are employed and of these 72% earn salaries of \$20,000 or more.

Transitions Trend # 10: PSE Leavers employed full-time are generally earning salaries that are comparable to graduates in the general population. (Continuing Trend)

In 2009, of the 11 participant Leavers, 8 are employed, and only one woman earning \$18,000 considers herself to be under-employed.

Transitions Trend # 11: Field of study likely influences low salaries of Transitions participants. (Continuing Trend)

Our *Transitions* cohort has often chosen post-secondary programs in the Arts and Social Sciences, whose average annual earnings are lower than in professional programs. For example, in Ontario the average salary six months after graduation for someone with a B.A in 2006 was \$32,010, and for a college Arts graduate it was \$28,072. Compare that to a university

architecture or engineering student in 2006, at \$52,057, or for a college graduate in technology, it was \$35,870.

Transitions Trend # 12: Female Transitions graduates are more likely to experience high rates of unemployment than male participants. (Ending Trend)

Though we listed this Trend as Ending last year, we investigated it again in 2009, just to see if the Trend was indeed finished. In 2005, 19% of female and 7% of male graduates were unemployed, but in 2006 this figure dropped 8% and 4%. Since that time there has been very little change to these low figures, and thus Trend # 12 is ending.

Transitions Trend# 13: Transitions participants have a slightly higher unemployment rate than the general population. (Continuing Trend)

In 2009, the rate of unemployment among *Transitions* participants is 12.8%, up from 8% last year. This rate of change may be explained by the recession, but given that it is higher than Canadian rate of 8.6%, we can no longer say that this Trend is ending as was the case last year.

Transitions Trend # 14: Transitions participants place great emphasis on educational and career goals, while social goals remain relatively low. (Continuing Trend)

In our life goals section, we asked participants, what kind of goals other than career goals do you wish to achieve in the near future? Consistent with previous reports, 56% responded buy property, 69% travel, 66% be debt free; while social goals such as get married 51%, start a family 46% and have a steady relationship 34% continue to be relatively low goals. Pursuing further education remains steady, years after graduation, at 34%.

Transitions Trend # 15: A high number of Transitions participants engage in volunteer work. (Continuing Trend)

Consistent with past years, in 2009, 45 of 123 participants (35%) do volunteer work in addition to everything else in their busy lives.

Transitions Trend # 16: A high number of Transitions participants engage in physical activity. (Continuing Trend)

In the general population a paltry 30% of people regularly participate in physical activity. Last year our *Transitions* rate was a comparatively high rate of 59%, and in 2009 it is a very impressive 63%.

Transitions Trend #17: Transitions participants appear to be resilient in social relationships. (Continuing Trend)

Last year, 63% of participants reported being satisfied or very satisfied with their friendships, and 53% reported the same regarding their relationships. In 2009, the satisfaction with friendships figure has risen to 65% and satisfaction with relationships to 54%.

Transitions Trends #18: Transitions participants disclose their learning disabilities at work only when necessary for the job. (Continuing Trend)

In 2009, 48% of participants who are currently employed responded that they have disclosed that they have a learning disability at work, down only slightly from 50% in 2008. In order to receive services as pilot students, 100% had to self-identify to the disability office, and since only two participants have indicated receiving a negative reaction, we can conclude that people identify only as needed for the job.

Transitions Trend #19: Significantly more women working full-time disclose their learning disability at work than men working full-time (Continuing Trend)

In 2009, 11 men have disclosed to their employer that they have a learning disability compared to 23 women.

Transitions Trend #20: Few participants who are currently employed use accommodations and/or assistive technology at work. (Continuing Trend)

All participants currently using accommodations at work had no problems with employers, but very few report needing them. Of the 99 participants who are currently employed only 20 use accommodations at work. This figure has not substantially changed since the beginning of *Transitions*.

Transitions Trend #21: Transitions participants have good relationships with their coworkers. (Continuing Trend)

Last year, 88% of participants described their relationship with their co-workers as comfortable. In 2009, that percentage has risen to an impressive 93%.

Transitions Trend #22: An overwhelming percentage of Transitions participants experience job satisfaction. (Continuing Trend)

Transitions participants have always rated high in this category, and in 2009, 74% (the highest percentage so far) indicated that they are satisfied with their job.

Transitions Trend #23: Overall, Transitions participants feel they have learned how to manage their learning disability. (Continuing Trend)

Though the 78% of participants indicating that they have learned to manage their disability maintains our Trend # 22 as continuing, it is less than the 2008 *Transitions* high of 92%. This trend will be monitored to determine why there was a percentage drop in this category and what it might mean.

Transitions Trend #24: A higher percentage of Transitions participants report being employed in a field related to their education than the general population. (New Trend)

The Provincial Overview of Survey Results of College Students says that 54% of people surveyed in a full-time job are working in a field related to their education. In 2009, 77% of our *Transitions* cohort reports being in a related field, which is up by 2% from last year.

A Note on Resiliency—Observations on Transitions Progress after Year Six.

It may be that resiliency attainment is as important as educational attainment for persons with learning disabilities, and/or that the former is only possible with the latter. In focus groups of pilot students leading up to the commencement of *Transitions*, students consistently talked about the difficulties of living and dealing with learning disabilities at all levels of school. People talked about feeling inadequate, stupid, being afraid of failure. Though we would not wish these experiences on young people, perhaps there is a silver lining related to enduring difficult experiences. Perhaps an element of resiliency develops from dealing with not just the learning disability, but with adversity. In September 2009, a Globe & Mail article speculated that 15% of all Ontario university students will be diagnosed with some form of mental illness during their four years of education. Given that the current percentage of all students registered with Disability Offices in Ontario is approximately 3% of the general population, this figure is truly daunting. A new American book describes "the mental health crisis on college campuses these days, with alarming numbers of students who are engaging in self-destructive behaviors like binge drinking and cutting or who are disconnecting through depression." (Hara Estroff Marano, A Nation of Wimps: The High Cost of Invasive Parenting).

Estroff Marano contends that modern parenting provides children with material goods at the expense of teaching young people about how to effectively deal with challenges and adversity. "The generation of young people now coming of age is extraordinarily endowed in material terms—but unusually experience deprived. Their lack of challenging and life-defining experiences all their own impairs their ability to adapt to life in all its unpredictability." (p.4)

Estroff Marano says that the intense control parents exert today --what she calls hyperinvolvement--is based on fear, and that this anxiety is transmitted to children with unfortunate consequences. "Their efforts, however, weaken children from within, creating fragility by directly transmitting anxiety and then compounding the problem by depriving kids of coping skills and a sense of self-efficacy." (p. 7)

With these uncomplimentary thoughts in mind, we wondered if/how these assumptions fit our cohort's childhood experience. We know from experience and from focus groups, that students with learning disabilities do not make it to college or university without significant parental support and involvement. We also know from experience and more recently from the LDAC report, that people with learning disabilities who do not attain post-secondary education have significant and pervasive difficulties in life. (LDAC, "Putting a Face on Learning Disabilities, www.pacfold.ca). From all indications the role of parents for *Transitions* participants was uniformly positive, with close involvement of necessity rather than hyperinvolvement due to anxiety and a need to control. Further, we have often despaired those capable young students with learning disabilities who do not have supportive parents, since they never get to college or university, and therefore most likely never realize their potential.

Though children with learning disabilities need their parents support in order to make it to post-secondary education, they are not necessarily successful in their college or university program because of their parents' continued and constant support. Rather in directly dealing having a learning disability, people may have become resilient out of necessity since no one can do the work to attain an education for another person. Our *Transitions* Trends may be indicating that the condition that made life difficult--dealing with a learning disabilities, otherwise known as *adversity*--is the very thing that has allowed them to adapt, survive and thrive in a competitive adult world.

Participants have consistently expressed that as young people they felt inadequate and feared failure as a result of having a learning disability. Absolutely no one assumed that succeeding in education and life would be easy, but interestingly, people also expressed that these negative feelings contributed to their resolve to work harder and prove to those who held negative assumptions that they could do it. If we define resiliency as the ability to succeed in the face of adversity, it seems that the experience of having a learning disability, and the parents who supported this defining notion that yes you can do it, has a pay off after all. Unlike the people Estroff Marano characterizes in her book, our successful *Transitions* people are feeding off their experiences, adapting to the cards they have been dealt, and facing adversity without fear.

Final note on resiliency: One of our Transitions participants proudly reported this year being thrilled that her daughter has begun studying at the same college where she had been a LOTF pilot student. She attributes the Centre for Students with Disabilities (CSD) at Conestoga College with providing the supports she needed in order to be successful and graduate. Attending mom's former college is nice enough, but in this case the real story is that the daughter, who also has a learning disability, has been successful because she is also receiving supports from the CSD. No doubt our Transitions mother has been positively involved in getting her daughter through primary and secondary school and into a post secondary program. But having learned resiliency herself through experience, she no doubt understands that with the support of CSD, her daughter must now develop resiliency in order to deal with adversity and successfully forge her own life. Fundamentally, Transitions offers insight into how adults with learning disabilities can become successful. As such, this mother and daughter story is, to borrow from the commercial world, priceless.

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I. METHODOLOGY

The sixth *Transitions* survey was launched on January 1, 2009, and the surveying ended on May 30th, 2009. The survey was once again made available to participants to complete either online via the *Transitions* Portal or by telephone with a Research Assistant. Mailed surveys were continued as a third option for those participants were very difficult to get a hold of, or otherwise did not have access to the Internet but who also did not prefer to do the survey over the telephone.

Our final figure of completed surveys for this round is 123, up from our total of 93 in 2008 and 119 in 2007. This reversal of the expected attrition rate is unprecedented in longitudinal research.

The following will outline in detail the surveying process as well as the obstacles that were encountered for the fourth phase of the Transitions Study.

I. 1. Getting Started

In preparation for the sixth round of *Transitions* surveying, the Research Assistants sent out a general email to all *Transitions* participants notifying them that the sixth survey was about to be released. Surveying commenced on January 1, 2009, when participants were emailed invitations, which included their unique token IDs, as well as a link directing them toward the Transitions Portal where they can complete the survey online. The email invitations were well received by the participants resulting in a healthy level of surveys being completed online within the first couple of weeks. Some participants eagerly responded by completing the survey online, while some sent one of the Research Assistants an email requesting a telephone survey.

In spite of this positive start, we did encounter some difficulties, all of which are in keeping with the nature of longitudinal research.

I 2. Telephone Surveying

Once the sixth survey was launched and all participants were contacted either through email or telephone, our next step was to get the participants to complete the survey. As stated above, there was an early surge due to the email invitations, which resulted in many online surveys being completed via the *Transitions* Portal. As the weeks went by, however, it became clear that the level of involvement and the number of surveys being completed online was declining.

In an attempt to revive the momentum, the Research Assistants began a "reminder campaign" and started emailing and calling participants on a regular basis to encourage them to complete the fourth *Transitions* survey. This generated the revitalization that we were hoping for as another batch of participants completed the survey online, while others requested to have a telephone survey with a Research Assistant. Some were willing to complete the survey when the first contacted by a Research Assistant. Some participants, as a result of their learning disabilities, found the online survey to be overwhelming and too difficult to navigate. These concerns were easily addressed by scheduling a telephone interview, during which the participant completes the survey verbally while a Research Assistant transcribes their responses.

I. 3. Telephone Surveying: The Interview

Telephone surveys were set up according to the availability of the participants and all efforts were made to accommodate their schedules by the Research Assistants, in an attempt to engage as many participants as possible and to retain their interest in the study. As a result, telephone surveys were conducted during the weekdays and on weekends in the morning, afternoon or evening depending on the participant's schedule.

However, a couple of obstacles arose when a Research Assistant telephoned the participant on the agreed upon date and time to complete the survey. First, the participant was not at home, and second, the participant had to reschedule because something else had come up. This of course delayed the surveying process, because in some cases it would take numerous more attempts for the participants to complete the survey either because they became unreachable or they were too busy with school or work.

When a Research Assistant was finally able to get a telephone survey underway, she would notify the participant that the length of time it would take to complete the survey is about 30 minutes. The Research Assistant would then ask the questions and transcribe the responses given by the participant. The advantage to conducting a telephone survey included the ability to elaborate on or to clarify questions, which resulted in more detailed responses. By speaking to

the participant, the Research Assistants also had the opportunity to get to know them on a more personal level, which helped to create a relationship between the participants and the Research Assistants and which will hopefully enhance the *Transitions* community as the study progresses. It was also imperative for the Research Assistant to obtain the most up-to-date contact information to help combat participant attrition.

Once a survey had been completed, the Research Assistant would then log on to the *Transitions* Portal to access the online survey. In order to input the responses, the Research Assistant had to enter in the participant's unique token ID, which is what the study uses to differentiate between all the participants.

I. 4. Online Surveys

As with previous surveys, participants have the option to save their responses and return to the survey at a later date and time.

Since the beginning of the study, the Research Assistants expected that the convenience factor of the online survey would elicit a positive response from participants, particularly as they could do the survey at their own leisure and in the privacy of their own homes. Since many of the Transitions participants are familiar with computers and the Internet, they expressed preference for the *Transitions* Portal, though procrastination proved to be a major obstacle. On average, it took about four to six email and telephone reminders combined before the majority of participants completed the survey online.

I. 5. Mailed Surveys

Given the difficulty in reaching some of the *Transitions* participants, the Research Assistants decided to continue offering the option of a mailed survey with a pre-paid envelope that had begun in the second phase. They mailed surveys to participants without email addresses or Internet access. It was hoped that the mailed surveys including a personalized letter would succeed in encouraging participants.

When the Research Assistants followed up with participants, some of them did mention that they would prefer having the survey mailed out rather than completing it online or by the telephone. There were a couple of setbacks with this approach. For example, some participants thought that the survey was junk mail and threw it out before opening it. Other participants forgot about the survey after initially opening it and did not complete it at a later date.

I. 6. Transitions Portal

The *Transitions* Portal, located at www.transitionsportal.ca, came into existence in the spring of 2005 and accompanying its launch was the *First Annual Transitions Longitudinal Research Study to the Ministry of Training, Colleges and Universities*. A PDF version of all *Transitions Annual Reports* can presently be downloaded from the *Transitions* Portal.

One of the main purposes of the Portal is to create a sense of community among the *Transitions* participants and staff. The Portal is meant to be a sort of virtual meeting place where participants can get together and meet each other to share their experiences about what it is like for them to be in school, or getting through it, as well as discussing how their learning disabilities affect their work. The Portal provides a forum for participants to gather, and in this way act as a substitute for face-to-face meetings, which are not possible at this time given the diversity in geographic locations of participants ranging from British Columbia to Nova Scotia

I. 7. Transitions Administrative Portal

In addition to the public *Transitions* Portal, there is also an Administrative Portal which only *Transitions* researchers have access to. The Administrative Portal is where all completed surveys are maintained, providing the Research Assistants with the convenience of viewing the responses online by simply logging in and selecting which survey they wish to analyze. The Administrative Portal has a variety of functions, including the ability to send out emails to the participants, keep track of who has completed the survey and who has not, export data into an Access database for analysis, and also to provide a manageable way of looking up token IDs.

The Administrative Portal also allows Research Assistants to update any new contact information for participants by editing his or her particular profile, though such information is also entered into the *Transitions* Study Database.

I. 8. Transitions Database

The *Transitions* Study Database is essentially a very detailed Excel spreadsheet, on which the Research Assistants record everything from telephone numbers to addresses to small notes about what participants are planning on doing in their immediate future, so as to get an idea of some of the changes that could happen when the next round of surveying begins.

This database is the primary resource that the Research Assistants work with in terms of contacting participants, updating their contact information including email addresses and telephone numbers, as well as keeping track of how the surveying process is going.

It is then the responsibility of the Research Assistant to contact and engage her own group of participants and to encourage them to complete the survey. By dividing up the participants it also helps to promote a sense of familiarity, with the same Research Assistant intending to follow through year after year. Participants were able to recognize the name of their Research Assistant resulting in fewer deleted email messages and ignored telephone calls.

I. 9. Transitions Methodology Challenges

Longitudinal studies are fraught with methodological challenges. Maintaining secure funding for the duration of a study is a familiar challenge to conducting longitudinal research. Keeping track of a highly mobile cohort of participants engaged in the busiest and most complicated phase of their lives is not easy. Asking people to pause in their busy lives and complete a long survey each year is also not easy. It is well known that participant attrition is one of the most difficult aspects of longitudinal research, and we are grateful to our participants for staying with the study.

Once again, the major challenge in the sixth phase of surveying was the difficulty contacting participants due to invalid telephone numbers, addresses and email accounts. Incorrect email information was an issue for several reasons – many of the participants ceased to use their school email account after gradating and did not provide us with a new address, some simply stopped using one account in favour of another and, in some cases, participants did not have access to a computer due to different living arrangements or no longer being a student. Without fail, Research Assistants make an effort to obtain correct email addresses for all participants who are surveyed, even requesting a 'primary' and 'secondary' address when possible.

With respect to inaccurate telephone and address information, drawing from a transitory population makes it challenging to maintain a database that is up-to-date. Despite the fact that Research Assistants have made significant efforts to collect current contact information in each

phase of surveying and have urged participants to forward new telephone numbers or addresses at any time of the year, it has proved difficult. Besides invalid contact information, another obstacle was the frequency of telephone calls going to voice mail. It was very unusual for a participant to respond to a voice mail message, so it was ineffectual to leave a message in these instances. To compound these difficulties, family members were often unwilling to divulge new telephone numbers if they did not recognize the caller or the name of the study. Without an accurate telephone number or address, the usual means of searching for a person via the Internet yielded no results. Still, the overall surveying process was successful, and our core *Transitions* participants are committed to participating in the study for its duration.

II. LITERATURE REVIEW

III.1. Overview of primary articles used in this study related to the General Population

Justin Bayard and Edith Greenlee. "Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005." Culture, Tourism and the Center for Education Statistics Research Papers, *Statistics Canada*, 2009.

Until this report was released, the primary article used for comparing *Transitions* participants with graduates in the general population had been Mary Allen and ChantalVaillancourt's "Class of 2000: Profile of post-secondary graduates and student debt." For *Transitions* purposes, this recently published report by Justin Bayard and Edith Greenlee, which tracks the labour force success of the Class of 2005, will replace the earlier report as our primary source for general population employment statistics. This report represents the first results of the 2007 National Graduates Survey.

The majority of graduates of the Class of 2005 (64%) did not pursue further studies in the two years following graduation and this rate is lower than the rate for the Class of 2000 (67%). The median annual earnings of College graduates working full-time in 2007 was \$35,000, while bachelor graduates earned \$45,000. These salary figures are \$6000 higher than the median average earnings in 2000. The proportion of women working part-time was more than twice that of men in 2007. In addition, male graduates had higher earnings that female graduates, at all levels of education.

Of particular interest to the *Transitions* cohort, growth in full-time employment among 2005 graduates compared to 2000 graduates varied greatly across education levels and fields of study. Most importantly, at the college level, the rate of full-time employment actually fell in many fields between 2002 and 2007—most notably in Education (from 75% - 61%).

"Highlights from the 2006 Graduates of Ontario University Undergraduate Programs." *Council of Ontario Universities*, July 2009.

This executive summary done by the Council of Ontario Universities draws its information from the Ontario Universities' Application Centre from December 2008 to March 2009. This survey is designed to describe employment experiences, earnings and skills matches of students who graduated in 2006 from undergraduate university programs.

Two years after their 2006 graduation, 95.7% of graduates from undergraduate degree programs in the province of Ontario were employed compared with a rate of 94.1% six

months after graduation. Their average annual earnings two years after graduation was \$49,468.00 annually compared with \$\$41,699.00 achieved six months after graduation. Two years after graduation, 85% of graduates were working either 'closely' or 'somewhat' related to their field of study, compared with 79.1% six months after graduation.

"2006-2007 Employment Profile: A Summary of the Employment experience of 2006-2007 College Graduates Six Months after Graduation." *Ministry of Training, Colleges and Universities*, 2008.

This report published by the Ontario Government and its data is based on a census survey of graduates conducted six months after graduation. The overall response rate was 71.3% of graduates.

Six months after their 2007 graduation, 56.4% were employed full-time (full-time is said to be over 30 hours a week in this report), 9.8% were employed part-time, and 7.2% were unemployed and looking for work. The average salary for an Ontario college graduate six months after graduation was \$30,303 (2006-2007 *Employment Profile*). Six months after graduation, 62.3% of graduates indicated that they were employed in a job related to their program of study, 10.7% said they were in a job "partially related" to their program of study, and 27% said they were in a job not related to their field.

Canadian Policy Research Networks (CPRN) Report, April, 2008.

This report claims that 23.7% of Canadians under the age of 25 report feeling overqualified in their jobs. This statistic is significant because it represents the highest percentage among 16 nations, including the United States, where 19% of people under 25 feel overqualified. This follows on a trend towards an increase in low wage workers, despite economic growth. For example in 2000, that figure, adjusted for inflation at \$11.25, was 19.1%.

This report recommends an increase in the availability of co-op programs and encouraging students to consider trade schools

Rene Morissette and Anick Johnson. "Are Good Jobs Disappearing in Canada?" Business and Labour Market Analysis Division, *Statistics Canada*, 2005. 11F0019MIE – No. 239.

Using data about hourly wages from the Labour Force Survey from the 1997-2004 period, this study sets out to assess whether the importance of low-wage jobs and well-paid jobs has changed over this period of time. They find little evidence that the importance of well-paid jobs has declined, and little evidence that jobs paying \$10.00 per hour or less have increased in

importance in the Canadian economy.

Significantly, however, this study highlights the increasing gap between young workers (under 35) and those who have been in the workforce for years. Importantly, it also shows that within age groups, the wages of newly hired male and female employees (those with two years of seniority or less) have fallen substantially. In addition, in the private sector, a trend of hiring new employees on a temporary basis has risen substantially, from 11% in 1989 to 21% in 2004. The authors suggest that companies benefit by offering temporary jobs to their new employees because it reduces their need to provide defined-benefit pension plans.

Rene Morissette and Garnett Picot. "Summary of: Low-paid Work and Economically Vulnerable Families over the Last Two Decades" Business and Labour Market Analysis Division, Statistics Canada, 2005. 11F0019 - No. 249.

This study analyses fluctuations in hourly wages over the period of 1981-2004. In this period of time, hourly wages have remained remarkably stable, and among employees ages 17-64, median hourly wages remained at approximately \$15. However, wages in full-time verses parttime jobs evolved in a very different way. Median hourly wages in full-time jobs rose about 5% while those in part-time jobs fell by 15%. In addition, median wages among newly hired employees has fallen. Median hourly wages for male workers with two years of seniority or less fell 13% between 1981-2004, while among women they fell 2%.

Overall, the proportion of low-paid jobs has been stable in this time period. In 1981, 17% of the jobs held by workers aged 25-64 paid below \$10 per hour, and this changed to 16% in 2004. This study theorizes that since the workforce has become better educated and more experienced over the last two decades, one would expect the incidents of low-paid work to fall. However, this was not the case, and within demographic groups like those aged 25-34, the proportion of low wage work increased.

Lev Grossman. "Grow Up? Not so Fast." Time Magazine, January 24, 2005.

There is a strong trend among young people today to live at home with their parents well into adulthood, to extend finishing their education, to delay establishing their career, and to avoid or delay committing to permanent relationships. This cover Time magazine article characterizes this twentysomething phenomenon as an extended childhood, a sort of Peter Pan syndrome.

"The years from 18 until 25 and even beyond have become a distinct and separate life stage, a strange, transitional never-never land between adolescence and adulthood in which people stall for a few years, putting off the iron cage of adult responsibility that constantly threatens to crash down on them. They're betwixt and between. You could call then twixters."

Of particular interest to our *Transitions* panel whose average is 26, is that "the percentage of 26 -year-olds living with their parents has nearly doubled since 1970, from 11% to 20%...." In 2004, 49% of *Transitions* participants were living with their parents, and in 2005 the number had dropped to 39%. As one can see, 39% is much higher than the North American average of 20%. There are extenuating reasons why the *Transitions* group have chosen to live at home longer than the general population, often related to support and the financial assistance they receive from their parents. Living arrangements are one of several interesting social issues that *Transitions* will observe in the coming years.

The Daily, "Study: Post-secondary Education-Who leaves and Why," an excerpt from the Statistics Canada, 2002 Youth in Transition Survey (YITS), November 18, 2004.

Approximately one in every seven students (age 20-22) who attend post-secondary education quit, with the most common reason given for leaving being a lack of program fit. Interestingly, almost 40% of students who left post-secondary programs between the ages of 18-20 had returned two years later.

Students who stayed in college or university were more likely to report being confident about their skills, were able to make friends easily, and never thought about dropping out.

Not surprisingly, post-secondary Leavers expressed relatively low satisfaction with their program choice. Leavers also cited financial barriers as a major obstacle to continuing with their post-secondary education.

Charles M. Beach and Ross Finnie. "A Longitudinal Analysis of Earnings Change in Canada." Business and Labour Market Analysis Division, *Statistics Canada*, 2004. 11F0019 – No. 227.

This study analyses tax-based longitudinal data collected from 1982-1989. It found that over this period of time there has been a rise in earnings of women, increased polarization of earnings among men, and a significant decline in the real earning of entry level workers (age 20 -24) for both men and women. In addition, upward mobility with regard to wages is shown to be significantly higher for male than for female workers, though with some decline in the 1998-1999 periods.

Ross Finnie and Ted Wannell. "The Evolution of the Gender Earnings Gap Amongst Canadian University Graduates." Business and Labour Market Analysis Division, *Statistics Canada*, 2004. 11F0019MIE – No. 235.

This papers analyses the gender earnings gap amongst Canadian Bachelor's level university graduates. The overall gap, after two years in the workforce, was quite narrow, though it increased five years after graduation, with men earning more over time than women and increased further over time. Women are shown to be overrepresented in disciplines that generally have low earnings: "a large portion of the gender earnings gap amongst recent graduates has been associated with a general tendency for female graduates of a given field of study to have lower earnings than males regardless of the specific nature of their current job characteristics, post-graduation work experience, or personal attributes." (13) A contributing factor may be that men employed full-time work more hours than women, with the gap growing over time. Many more male than female graduates worked very long hours (more than 50 hours per week), with more than one-quarter of full-time employed men working greater than 50 hours per week in every age group, compared to just 17.1% of female graduates. The gap, however, is greatest amongst married graduates with children: married mothers in full-time work averaged at least four hours less work a week than their male counterparts.

Rene Morissette et al. "Relative Wage Patterns among the Highly Educated in a Knowledge-based Economy." Business and Labour Market Analysis Division, *Statistics Canada*, 2004.

The major finding of this paper is that even though employment grew much faster in the high-knowledge industries in the last two decades compared with other industries, trends in relative wages and real wages of university and high school graduates have displayed similar patterns across industries. However, earnings of university graduates with degrees in engineering, mathematics and computer sciences are higher than those of other university graduates (21). This study also notes that in all private sector industries, young and prime-aged female university graduates have experienced faster wage growth than their male counterparts (23).

Mary Allen and Chantal Vaillancourt. "Class of 2000: Profile of post-secondary graduates and student debt." Culture, Tourism and the Centre for Education Statistics Division, *Statistics Canada*. 2004. Catalogue no. 81-595-MIE – No. 016.2004.

This research paper includes results from the 2002 National Graduates Survey, which, at the time of this report, is the most current Canadian National study about the transition from post-secondary education to the labour market. The NGS is a longitudinal study that measures the labour market success of graduates from Canadian universities and colleges two and five years after graduation. The class of 2000, surveyed initially at the time of graduation, returned results in 2002 about education, employment, and debt.

Allen and Vaillancourt highlight the complexity of the transition to the labour market after graduation. Despite the myriad of paths chosen by this graduating class, two years after graduation 90% of the class of 2000 who did not return to post-secondary education were

employed.

Both university and college graduates were equally likely to be employed; however those with bachelor degrees typically held jobs with higher earnings. Eighty-one percent of both college and university graduates were employed full-time, with 9% of college graduates working part-time and 8% of university graduates working part-time. The unemployment rate was the same for both university and college graduates in 2002 with a rate of 7%.

The estimated gross annual earnings of 2000 graduates who were working full-time in 2002 were markedly different depending on the level of educational attainment. The median annual earnings for a college graduate was \$31,200.00 while bachelor graduates typically earned \$39,000.00 annually. Gender does play a significant role when it comes to the difference in salaries between college and university graduates. The median annual earning of a male college graduate was \$35,000.00 while the median annual earnings of a female college graduate was \$28,600.00 annually, with a difference of \$6,400.00. The same is true for university graduates. The median annual earning of a male university graduate was \$42,000 while the median annual earning of a female university graduate was \$37,000.00 with a difference of \$5,000.00. This wage difference is interesting, as Allen and Vaillancourt point out that female graduates were slightly more likely to be employed than their male counterparts two years after graduation, however they were less likely to be working full-time.

Mylene Lambert, Klarka Zeman, Mary Allen, Patrick Bussiere. "Who Pursues post-secondary education, who leaves and why: Results from the Youth in Transition Survey." *Statistics Canada*. 2004. Catalogue no. 81-595-MIE2004026.

This study uses data from the Youth in Transition Survey, a national longitudinal survey which first interviewed Canadian youth aged 18-20 in 1999 with a follow-up in both 2000 and 2002. Emphasis is placed on university education.

Over two-thirds of youth in Canada have gone to either college or university in their early twenties. In general, students who pursue post-secondary education are more likely to be women, single with no children, and they are more likely to have lived with two parents while in high school. Youth who have a strong sense of belonging in high school and who do well in high school are more likely to continue their education.

Fifteen percent of youth aged 20-22 who attended post-secondary left their studies without completing their program. Lack of program 'fit' is the most common reason for leaving post- secondary, though one in ten youth cited lack of money as the main reason, while only 7% left because they wanted to work. Those who left post-secondary to travel, to change programs, or who just 'wanted a break' were the most likely to return, with return rates of 68%, 47% and 38% respectively. Overall, almost 40% of youth that left post-

secondary education at the age of 18-20 had returned two years later.

Though this study reports the 2002 YITS findings, the writers of the report emphasize the ongoing nature of their work, stating: "future cycles of YITS will provide a clearer picture on the completion of post-secondary education...[and] will also allow for an in-depth examination of the labour market outcomes associated with having some post-secondary education..." (20)

Teresa Janz. "Low-paid employment and moving up: A closer look at full-time, full-year workers." *Statistics Canada*. 2004. Catalogue no. 75F0002MIE – 2004009.

The average Canadian who worked full time in 1996-2001 had a 14% probability of being employed with low hourly wages. Low hourly wages is considered less than \$10.95 per hour (after tax). Those with a university degree had an 8% probability of experiencing low pay compared to 21% of those with high school or less. Women in the service industry were most likely to experience low wages.

Sex differences remain with regard to annual earnings even when other variables were consistent like age, education, occupation and industry. Women earn significantly less money annually than men, on average \$4000.00 - \$8000.00 less. Women are more likely to be low paid and less likely to experience upward mobility in the workplace (men experience a 19% probability of low pay while women experience a 34% probability).

Sandra Franke. "School, work and the school-work combination by young people." Housing, Family and Social Statistics Division, *Statistics Canada*. 2004. Catalogue no. 89-584-MIE – No.3.

This research paper utilizes the General Social Survey and the National Graduate Survey to analyze the time use of high school and post-secondary students when they combine work and study and furthermore how that time use changes upon entry into the labour force.

The transition from school to work has gone from being a simple event to a process, currently estimated to take eight years to complete. The length of this process has an impact on other transitions, like leaving the family home, entering a conjugal union and having children.

One in three young people combine work and study instead of working full-time. Interestingly, the combination of light work and school does not cause men or women to change the amount of time spent on education. Light work has the same effect on men and women, both cut out leisure time, especially socialising and watching television. However,

when combining demanding work and school, socialising and leisure and sports become non-existent in the lives of working students. The amount of time spent sleeping also decreases.

Men tend to remain dependent on their parents longer than women, regardless of their employment status. Forty-seven percent of women at the post-secondary level no longer live with their parents compared with 34% of young men.

When the transition from school to work is completed, the time use pattern of young people relieves considerably. A job fills a large portion of the day but much time is left for leisure activities and personal care. Young men make the transition to work earlier than their female counterparts. Employed young men also devote more time to work than young women.

2001 Census: analysis series. "Education in Canada: Raising the Standard." *Statistics Canada*. 2001. Catalogue no. 96F0030XIE2001012.

According to the 2001 Census, Canada entered the twenty-first century with a population better educated than ever, with 61% of Canadians ages 25-34 having completed post-secondary education. Twenty-eight percent of all individuals in that age group had university qualifications and 21% held college diplomas while 12% had trade credentials. By comparison, in 1991, only 49% of Canadians had completed education beyond high school.

As far as field of study is concerned, the highest number of Canadian graduates had degrees in Education with a rate of 14%. However, an increasing number of students are choosing technology and business fields in 2001 with Engineering and Commerce attracting the most students with 9% and 8% of the population, respectively.

Women accounted for 57% of the growth in university qualifications in the 1990 and similarly in college, women accounted for 59% of graduates. Two-thirds of trade certificates are held by men.

Klarka Zema, Tamara Knighton, and Patrick Bussiere. "Education and labour market pathways of young Canadians between age 20 and 22: an Overview." Culture, Tourism and the Centre for Education Statistics Division, *Statistics Canada*. 2001. Catalogue no. 81-595-MIE – No. 018.

This research paper utilises the Youth in Transition Survey, a Canadian National longitudinal study designed to examine the patterns of major transition in young people's lives, with a focus on education, training and work. It reports the results of youth aged 20-22 in 2001 with regard to education and work.

By age 22, 76% of youth had participated in post-secondary, though only 35% had graduated; this is because many youth at age 22 are still attending post-secondary education, and is not meant to indicate that they have left post-secondary. Eleven percent of youth in this age group left post-secondary without graduating, though more than 35% of those PSE Leavers at age 20 had returned to school at age 22.

The proportion of youth not in school and not working rose from 10% at age 20 to 14% at age 22. However the authors caution that this "should not necessarily be cause for concern," as many youth leave school to undertake activities outside the labour market such as travelling or volunteering. Unemployment in this age group rests at 3%. The writers of this report emphasise that this report is an initial overview, but that the analysis must be extended over the long-term.

Terman, Lewis M, Robert R. Sears, Lee j. Cronbach, and Pauline S. Sears. "Terman Life Cycle Study of Children with High Ability." *Harvard University: The Radcliffe Institute for Advanced Study, Murray Research Centre*. www.radcliffe.edu/murray. Murray Archive Date, 1996.

This pioneering longitudinal study began by comparing a teacher-selected group of children with high IQ's from (mostly) urban California with children in the general population to discover similarities and differences. Research continued from 1922 until the present with follow-ups every five years in order to explore the long-term development of gifted children. This is the lengthiest longitudinal study ever conducted.

As the questionnaire devised for young children could not remain the same as the population aged, new series of questions were devised at each five-year interval. The children in 1922 reported on school, interests and reading choices and again on the same in 1936 along with additional questions about life history and family relationships. In 1940 the questions were extended into the areas of the subject's marriage and children and future plans, with similar follow-ups in 1950-1960. From 1972, 1977 and 1982 the questionnaires dealt with problems of older people – retirement, aging etc. Besides the standardized tests (Stanford-Binet Intelligence Test and other intelligence testing from the time) there were also scales, listings and open-ended questions which were coded and recorded.

The Terman longitudinal study highlights the necessity of allowing a panel study of this kind to evolve and change as the population under question ages and develops. In fact, in 1945, the Terman study, on the request of the participants, sent out a brief two-page questionnaire concerning the effects of military service during World War Two. The broader purposes of longitudinal research, fully understanding the variables present in the life course of participants and the influence of those variables on performance, are best met when the questionnaire is flexible and adapts to allow emerging issues to be isolated and investigated.

In addition, the Terman study overall has a low attrition rate for such a lengthy study. There were 1,528 participants in 1922 and by 1983, 863 participants were still in contact. Though this may initially seem like a low number, we must remember that this study began in 1922 and 410 participants were deceased in 1983. Interesting to note is that only 36 participants voluntarily withdrew from the study and 214 were marked as "unknown" in 1983, which meant there had been no contact since 1977. Though it is difficult to define the attrition rate for this study because of the sporadic response to the numerous follow-ups, what can be said is that in 1982 data exists for 75% of men and 80% of women who are not known to be dead. The Terman study seems to show that hand-picking participants and remaining in contact with them is enough to keep participants involved in a longitudinal study, even for a life-time.

III. 2. Overview of primary articles used in this study on populations of adults with learning disabilities.

Hara Estroff Marano, "A Nation of Wimps: The High Cost of Invasive Parenting." Broadway Books, 2008.

In this new controversial book Estroff Marano seeks to explain why there has been an explosion of students diagnosed with mental illness on North American campuses. It was while researching this question for an article in Psychology Today that this editor of the same decided to write this book. She contends that the crisis in mental health among young people is a consequence of parental *hyperinvolvement* which "is almost always counterproductive; though the very fact of their invasiveness parents co-opt developmental pathways and transmit anxiety to their children, undermining a sense of self-efficacy while promoting self-preoccupation." (p.6) Estroff Marano further contends that parents have lost sight of what the purpose of parenting is: "The meanness and competitiveness that parents impute to their children's world to justify their intervention more than likely reflect their own experiences of dislocation in the switched, sped-up, hyperlinked, globalized economy of the twenty-first century" (p.7)

This thesis has relevance to *Transitions* since students with learning disabilities tend to have strong parental involvement as a precondition of making it to post-secondary education. In the piece on resiliency at the beginning of this report, the case is made for the necessity of strong parental involvement for students with learning disabilities aspiring to college and university.

Kay Langmuir, "National project helps overcome accommodation issues," Queen's

Gazette, March 10, 2008, p. 5.

Disputes over accommodating disabilities comprise the largest category of human rights complaints in Ontario. As students arrive at college and university increasingly aware of their rights, and accommodation requests increase in number and complexity, faculty regard the issue as a challenge to academic integrity. As a consequence, a new pilot project has been created to help alleviate potentially litigious situations in the post-secondary arena. The Queen's based pilot, Post-Secondary Accessibility Consulting Team (PACT) has been funded for one year.

Archer, et al. "Putting a Canadian Face on Learning Disabilities" www.pacfold.ca. March 2007.

The Learning Disabilities Association of Canada (LDAC) released a study on the societal costs of learning disabilities in Canada on their website www.pacfold.ca on March 26, 2007. The research herein, begun in 2004 and costing \$302,000, purports to be unique "because it represents the first time any disability organization in Canada has requested access to Statistics Canada data surveys." The authors examined ten different sets of Statistics Canada data, and produced a report with a three-fold focus. It concentrates on children, youth and adults with learning disabilities and assesses the specific impacts of LD on each group. For the purpose of this literature review, we have chosen to highlight the PACFOLD data about participants in Ontario age 22-29, the same average age and province of residences our Transitions cohort.

The authors note that in Ontario, slightly more than one person in 100 (1.2%), age 22-29, report having a learning disability. Of these 62.0% were males. With regards to schooling, 42.6% reported less than a secondary school certificate as their highest level of schooling, and 32.5% reported attending trade school. No mention is made of people with learning disabilities who attend other post-secondary programs. Employment data is equally pessimistic, with 40.5% of 22-29 year olds with learning disabilities in Ontario being unemployed. Salary figures for those who were employed were extremely low; 26.3% earned between \$1-\$9,999 annually and 32.5% earned \$10,000 or more annually. With regards to health, results were more positive, with 50.7% reporting their overall health was excellent or very good and 46.3% saying their physical health was excellent or very good. Mental health figures were equally positive, with 47.3% saying their mental health was excellent or very good. However, when participants were asked how they handle unexpected problems, only 16.7% said they handled unexpected problems well, though 53.1% said they could handle unexpected demands well.

Stephanie Dunnewind, "Learning disabled young adults need some independence, author advise," in *The Seattle Times*, June 23, 2007.

This article is a book review for a new publication by Anne Ford, entitled, <u>On Their Own: Your Adult Child with Learning Disabilities and ADHD</u>. Ford notes that "learning disabilities don't go away," but supportive parents have to learn to allow their adult children to become independent. Ford asserts this despite the fact that a common thread between successful LD people is that their parents were very supportive.

Still, parents have to realize that at a certain point adult children with learning disabilities must learn to be adults in all respects. Ford encourages parents to continue to be supportive about safety and finances, but to provide space on social issues and employment. Though it may be difficult for parents to watch as their children make mistakes, perhaps taking on jobs for which they are not suited, it is part of the learning process: "They may lose a job or two, but your role is to be there to tell them it's not the end of the world and help them to get back in the saddle to try something new."

Virginia Galt, "It takes ingenuity and persistence to succeed, disabled workers say," *Globe & Mail*, October 4th, 2007.

Ryerson University and the Royal Bank of Canada have published the results of a new survey about the realities of working life for employees with disabilities. The report cites the many difficulties employees face as well as the enormous pride they receive from working in a competitive and professional environment.

The report is co-authored by Catherine Frazee, the former Ontario Human Rights Commissioner, who states that employees with disabilities, "are persistent and ingenious in balancing the complex demands of working in the corporation."

Unfortunately, there also exists a phenomenon of workers feeling the need to hide in the workplace. "Practicing concealment is a 'second job' layered into their work...A strong example comes from employees who use the distance and invisibility provided by e-mail and phone interactions to establish able-bodied virtual identities." As a consequence, some employees quietly limit their prospects for career advancement. As well, the report cites that coworkers and managers often felt disabled workers might be slower and less productive than able -bodied workers.

The report says that disabled employees are skilled at learning which co-workers and managers they can trust to ask for help. The best managers are those who have friends or family members with disabilities

"Participation and Activity Limitation Survey," The Daily, Monday, December 3, 2007.

Statistics Canada has issued a report based on data from the Participation and Activity Limitation Survey (PALS). The report cites that an estimated 4.4 million Canadians—one in every seven—has a disability. That figure represents an increase of over three-quarters of a million in just five years (12.4% of the population in 2001, increased to 14.4% by 2006).

Most significant in the report to our *Transitions* Longitudinal Study, is the fact that learning disabilities underwent a large increase, not just for children but for adults as well. For children 5 to 14, learning disabilities joined chronic conditions as the most common form of disability. Astonishingly, for children aged 5-14, 69.3% of those with a disability reported a learning disability. Thus 121,080 or 3.2% of all children age 5-14 reported having a learning disability. For adults aged 15 and over, the rate is even more astonishing with almost 40% increase in learning disabilities to an estimated 631,000 in 2006.

Roslyn Kunin & Associates. "Literature Review on the Impact of Post-Secondary Education on Labour Market Attachment for Persons with Disabilities." Presented to The Disability Resource Network, February 2006.

This report combines data from the Statistics Canada Participation and Activity Limitation Survey (PALS) and the Statistics Canada Survey of Labour and Income Dynamics (SLID) in order to assess the impact of post-secondary education on labour market success for persons with disabilities. It applies its findings to the disabled population of British Columbia. This study shows a "strong positive relation between post-secondary education and labour market attachment for persons with disabilities." (Kunin 1) Increasing educational attainment among persons with disabilities improves their chances in the labour market and decreases the percentage of those not in the labour market from 58% to 30.3% for men and from 73.3% to 40% for women (Kunin 7). While this is also true for the general population, what this study makes clear is that higher educational attainment benefits persons with disabilities much more positively than the overall population (Kunin 9). It therefore calls for increased support for students with disabilities in post-secondary programs. The authors note that there is no research yet, linking teaching approaches, teacher qualifications, length of programs etc. in post-secondary, to success in the labour market for students with disabilities.

Levine, Phyllis, Camille Marder, and Mary Wagner, "Services and Supports for Secondary School Students with Disabilities: A Special Topic Report of Findings from the National Longitudinal Transition Study-2 (NLTS2)," May 2004.

This 10-year longitudinal study is following a population of more than 11,000 youth with disabilities ages 13 through 16. This extraordinarily large population was receiving special education services in grade 7 or above in the 2000-01 school year.

The Individuals with Disabilities Education Act Amendments of 1997 mandate that "...all children with disabilities have available to them a free appropriate public education (FAPE)

that emphasises special education and independent living" (IDEA 1997 Final Regulations, Sec300.1a U.S. Department of Education, 1999). This longitudinal study tracks and provides the first national picture of the services and supports provided to secondary school youth with disabilities in a single year. As the study evolves it will provide a far more complete picture as youth develop transition plans, complete their high school programs, and begin to use post-school services and supports. Perhaps most noteworthy for the *Transitions* study, subsequent reports will show how services and supports received during secondary school affect students' long term support needs and outcomes.

Robert Frengut, "Social Acceptance of Students with Learning Disabilities," Learning Disabilities Association of America (Originally published in the *Learning Disabilities Association of Nebraska Newsbriefs*, Spring, 2003).

This article contends that while students with learning disabilities have developed sophisticated strategies for learning, many are sorely lacking in social skills. "Many students have commented that they spent too much time on their special academic needs and not enough time just socializing with friends. Sadly, and for many, without the necessary social skills, an LD student faces a bleak outlook for the future in the real world."

The article talks about the positive contribution that computer technology has made for persons with learning disabilities, but warns that the computer is no substitute for social interaction. According to Dr. Joseph LeDoux of New York University's Centre for Neural Science, emotions define who we are, and consequently, we must relate to the world in order to become integrated into it.

Goldberg, Roberta J. et al. "Predictors of Success in Individuals with Learning Disabilities: A qualitative Analysis of a 20-Year Longitudinal Study." in *Learning Disabilities Research and Practice*. 18:4. 2003. pp. 222-236.

Goldberg and colleagues report on their qualitative analysis of interview data collected from a 20-year longitudinal study, earlier presented in Raskind et. al. (1999). Forty-one participants with learning disabilities were involved in this study that traced their progress from childhood to adult life and work. Unlike their previous research where quantitative data was statistically analyzed producing a number of significant success predictors, in the present study, the researchers focused on interview data and qualitative analysis. The main goal was to achieve deeper understanding of these success predictors from an insider perspective. The interviews were two to six hours in length and were conducted by four experienced professionals from the fields of ethnography, clinical psychology, and learning disabilities.

Qualitative analysis of interview data validated previous findings about success predictors and their contribution to specific outcomes for individuals with learning disabilities. More

importantly, the researchers gained a deeper understanding of specific cognitive strategies that shaped these predictors (flexibility, anticipating difficulties, breaking down goals into steps, reciprocal relationships with mentors, and recognition of stress triggers). They also identified several new themes, such as the profound influence of learning disabilities in many contexts, and the necessity for continued support throughout their life. Lastly, the longitudinal nature revealed considerable stability of success predictors from year 10 to year 20, with qualitative data revealing that attributes leading to formation of these predictors began to develop in childhood and remained remarkably stable over time.

The conclusions drawn by the authors are three-fold. First, their position in light of the evidence, demonstrating the impact of a learning disability across many areas of life, is that the field of research and service delivery currently has a very limited scope, focusing primarily on educational contexts. The researchers then argue for a need to broaden the spectrum of intervention strategies to include self-awareness, proactivity, perseverance, goal setting, use of support, and emotional coping. They finally emphasise that these efforts are fully justified by the fact that learning disabilities are life-long conditions, as confirmed by the findings from the present study, and require continuous support from parents, teachers, professionals, and the community.

Madaus, J. W., Foley, T. E., McGuire, J. M., & Ruban, L. M. "A follow up investigation of university graduates with learning disabilities." *Career Development of Exceptional Individuals*, 24:2. 2001. pp. 133-146.

This study represents one of the most recent follow-up investigations into employment outcomes for post-secondary graduates with learning disabilities. The authors surveyed 89 students who graduated from a public university in Northeast United States between 1985 and 1999. The sample came from a pool of students who received special needs services throughout their post-secondary education at this university. The questionnaire used in the survey was developed by the authors who took appropriate measures to ensure content and construct validity, and they also report high reliability at 0.92 and 0.95 for the two scales.

The results support the findings in earlier studies (as reported by the authors) that indicate successful transition of post-secondary students with learning disabilities into the workforce. As shown in the present survey, these individuals are employed at rates comparable to non-disabled graduates. Their full-time employment levels and salaries also exceed those of persons with learning disabilities who have no post-secondary education. Another finding to be noted is that 66% of participants indicated they did not disclose their disability to an employer. The two main reasons reported by those who did not disclose to their employer were as follows: no need for accommodations and fear of negative impacts on their job security.

The authors stress the importance of the findings showing much higher rates of

employment by the post-secondary graduates versus the high-school graduates with learning disabilities. This conclusion is made in light of a significant body of research showing below-average employment success rates for individuals with learning disabilities who did not pursue further education after graduating from high school. While they make a strong argument for the critical importance of post-secondary education for persons with learning disabilities, they also emphasize that all participants in their survey received formal support from the Special Needs Office at the university. The authors also caution about the generalizing findings due to a homogeneous sample - predominantly young, male, and Caucasian - as well as a high national employment rate at the time of the study.

Raskind, Marshall H. Higgins, Roberta J. Goldberg, Eleanor L., Herman, Kenneth L. "Patterns of Change and Predictors of Success in Individuals with Learning Disabilities: Results from a Twenty-year Study," in *Learning Disabilities Research & Practice*, 14:1. 1999. pp. 35-49.

The exploratory research presented in this article is a part of a 20-year longitudinal study, which followed the lives of 41 individuals with learning disabilities, from their entry into the Frostig Center in California as elementary school children, to adult life, and employment 20 years after leaving the Center. In this article the authors present results of a quantitative analysis of the findings to statistically determine the best predictors of success based on data collected at four points in time during the 20-year period. Data was gathered in multiple ways: records, testing, interviews, and researcher ratings on specific success predictors. The dependent measure of success was based on judgments by four researchers with a high inter-rater reliability of 0.97, as well as specific success domains, at 0.94.

It was found that 21 out of 41 participants rated as 'successful'. Statistical analysis determined most significant predictors of success to be: self-awareness, proactivity, perseverance, goal setting, presence and use of effective support systems, and emotional stability. The authors note that these predictors were more powerful than traditionally considered IQ, academic achievement, life stressors, SES, etc. The success predictors identified showed a high level of statistical significance and accounted for a large portion of the variance in participant success (at 75%).

The authors acknowledge that all participants possessed some of the success attributes, but it was the "successful" individuals whose scores on these predictors achieved statistically significant levels. A main recommendation by the researchers concerns the current practices in special education programs that focus mainly on academic achievement. It is argued that more emphasis should be placed on those attributes that demonstrate a high degree of predictive power as demonstrated in the present study.

Sam Goldstein, Ph.D., "Emotional Problems in Adults with Learning Disabilities,"

Learning Disabilities Association of America, (Originally published in *LDA*, Newsbriefs, July-August, 1998).

Though learning disabilities are a lifelong condition, the consequences of LD change. Particularly as one shifts from school to work and community, the implications become more significant. Children with learning disabilities rely heavily on their parents for support. Adults with learning disabilities often struggle to find social supports. For this reason, Goldstein contends that adults with learning disabilities may be at increased risk for developing emotional problems and psychiatric disorders in adult years. However, many individuals with LD do develop a variety of coping strategies that allow them to function well in life.

Levine, Phyllis and Nourse, Steven W., "What follow-up study say about post school life for Young Men and Women with Learning Disabilities: A Critical Look at the Literature." in *Journal of Learning Disabilities*, 31:3. 1998. pp. 212-233.

This paper is a literature review that references and synthesises the important follow-up American studies regarding post-school outcomes for young men and women with learning disabilities. Thirteen studies are referenced on post-secondary education and employment with respect to students who were served and have graduated from special education programs in the United States.

This examination of the literature on learning disabilities embraces the notion that higher education is the best investment for attaining one's aspirations and improving one's status in life. The critical question that is of particular interest to researchers is whether the same opportunities occur for youth with learning disabilities as exist for the general population. More specifically, do students with learning disabilities acquire skills and credentials that significantly improve their job opportunities, wages, level of independence, and quality of life? This question was also of interest to LOTF during its piloting years, and, in fact, it fuelled its determination to follow a cohort of post-pilot students in the form of a longitudinal study.

Levine and Nourse acknowledge that little is known about outcomes, particularly quality of life outcomes for graduates from special education programs. Consequently, there exists a need to research, to collect both quantitative and qualitative information:

"Despite the proliferation of follow-up studies in the past two decades, the immediate and long-term post-high school and long-term post-high school lives of youth and learning disabilities who were served in special education are not well understood; little is known about the quality of life these individuals experience, how they manage (or do not manage to fit) to fit into their communities, how satisfied they are with their lives, and how their life adjustment compares to that of students who were not identified as requiring special education services." (213)

This review cites studies that provide empirical evidence to demonstrate that, "generally speaking, youth with learning disabilities do less well than their peers without disabilities," a claim that students, parents and professionals have always known intuitively through experience, but whose causes and solutions remain to be explored.

The review concludes that while the attainment of post-secondary education may well hold the key to an enhanced quality of life for students with disabilities, the assumption has yet to be fully proven. The authors recommend further follow-up study in order to, "provide the empirical base necessary to advocate for improvements in service delivery, and... to improve the quality of life for our youth" (213).

Vogel, Susan A, Faith Leonard, William Scales, Peggy Hayeslip, Jane Hermansen, and Linda Donnells, "The National Learning Disabilities Post-Secondary Data Bank: An Overview." in *The Journal of Learning Disabilities*, 31:3. 1998. pp. 234-247.

This study reports on the assessment of support services policies, the proportion of students with learning disabilities and factors that affect differences in proportions in a national sample of American post-secondary institutions. A survey was used to investigate admissions policies, year of initiation of learning disability support services, type and location of support services, eligibility criteria for services and accommodations, the number of students with learning disabilities, and demographic and diagnostic information available. These factors contribute to a disparity across the U.S. of the percentage of students with learning disabilities enrolled at post-secondary institutions ranging from 0.5% to almost 10%.

This study references an earlier study that is worth noting in view of the subsequent success of the students who participated in the LOTF pilot programs, and more recently, the Enhanced Services Fund and the *Transitions* longitudinal study. As in most studies in the literature, this study is based on the assumption that completion of post-secondary education is the most effective means by which students with learning disabilities can become financially independent. According to Wagner, Newman and Backorby (1993), "3 to 5 years after exiting from high school, only 30% of the students identified with school-identified learning disabilities in the nation had enrolled in a post-secondary program and a discouraging one-half percent had competed a program or earned a degree." Wagner, Newman and Backorby could not have envisioned the *Transitions* panel with comparable progress with the general population.

Raskind, Marshall H, Paul J. Gerber, Roberta J. Goldberg, Eleanor L. Higgins, and Kenneth L. Herman, "Longitudinal Research in Learning Disabilities: Report on an International Symposium." in *Journal of Learning Disabilities* 31: 3. 1998. pp. 266-277.

This article presents highlights from an international symposium on longitudinal research and learning disabilities. Longitudinal research is presented as essential in the field of learning disabilities. According to McKinney (1994), "longitudinal research remains an under-used but powerful tool, in understanding the development of individuals with learning disabilities and its full impact on practice has yet to be realised."

McKinney is further quoted, consistent with the symposium theme, as follows: "[a] major failing is not taking full advantage of the descriptive and explanatory power of the longitudinal method itself. Accordingly, we still lack basic knowledge about the natural history of learning disability. Specifically, we know little about how the various risk factors that have been associated with the disorder interact over time to produce learning disabilities, or how the manifestations of the disorder evolve and change over time as a function of biologic and environmental factors. Also, we have little direct knowledge that can be applied to prevent or ameliorate the educational consequences of learning disabilities by altering the course of faulty development. Such are the broader purposes of longitudinal research."

Symposium participants noted the problems inherent in conducting longitudinal research, as follows: cost, funding, control group comparison issues, publication record, participant attrition, communication issues, missing data and excessive date. The symposium, somewhat facetiously wondered, "why would anyone want to do longitudinal research in the first place?" given these difficulties.

Nonetheless, longitudinal research with all its inherent difficulties is regarded as essential to a complete and holistic understanding of persons with learning disabilities, as they determined: "[i]n order to provide persons with learning disabilities with the proper opportunities/experiences and determine the most valid treatment/ interventions—in the long run—for promoting life satisfaction and success, we must fully understand the factors/ variables that are predictive of, and affect, specific outcomes. Again, longitudinal studies are essential for making such determinations."

Gerber, Paul J, Rick Ginsberg and Henry B. Reiff. "Learning to Achieve: Suggestions from Adults with Learning Disabilities." *Journal on Post-Secondary Education and Disability*, 10:1. 1993.

Seventy-one adults who all evidenced learning disabilities and who had achieved either moderate or high vocational success were interviewed to obtain valuable information about how they have coped successfully with their learning disability both in childhood and adulthood. The interview process covered six facets of life: vocation, education, family, social issues, emotional issues and daily living.

"The driving factor underlying the success of the entire sample was an effort to gain control of their lives." This study highlights both the internal and external manifestations of

attaining control and in this way demonstrates an ecological perspective about the way to attain success. Internally, it is shown that re-framing the learning disability is central to bind together desire and goal-orientation into a productive process. Externally, coping strategies are shown to be most efficient when the individual is persistent in using them and is in a responsive and supportive environment.

The study insists that service providers for post-secondary students with learning disabilities consider employing an ecological perspective, one that combines internal and external coping strategies. Service providers should insist on integrated approaches "that more accurately reflect the processes used in attaining success." As well, a holistic approach also involves allowing students to speak with other adults with learning disabilities who can relate their pathways to success and their own unique strategies.

Pamela B. Adelman and Susan Vogel, "Issues in the Employment of Adults with Learning Disabilities," Learning Disabilities Quarterly, vol. 16, No.3, Adults with Learning Disabilities (Summer, 1993), pp. 219-232.

Adelman and Vogel begin the article by showing the general ineffectiveness of specialized vocational training. They cite a major finding that, "50% of students with LDs felt that they had not received the training in academic and job-related skills they desired" (p.220). Importantly, on the same page it is noted that approximately 62% of disabled students who worked during high school had jobs after graduation, compared to 45.2% who did not work. This is significant as it has also been the finding of the LOTF pilot years and it is the contention of *Transitions* that there is no substitute for direct and applicable work experience as a means for allowing LD adults to compete equally in the workplace.

A common theme throughout both the LOTF pilot years (1998-2002) and thus far in the *Transitions* study has been the importance of resiliency. "The authors concluded that utilizing support services in college may have a significant long-term benefit since it assisted these individuals both in understanding their learning disabilities and in developing compensatory strategies as they entered and progressed in their work." (p. 221)

In their conclusion Adelman and Vogel suggest that one important reason LD adults have employment difficulties is because they lack academic skills, and that "currently little data are available on the employment of individuals with LD who have completed postsecondary programs or graduated from college." (p. 230)

Transitions is now gathering that data, and there are strong indications that the study will establish a central research finding as follows: the completion of a post-secondary program appropriately applied is the best means for adults with LDs to compete in the labour market with the general population.

Henry B. Reiff and Sharon deFur, "Transition for Youths with Learning Disabilities: A Focus on Developing Independence," Learning Disabilities Quarterly, Vol. 15, no. 4 ADA and Learning Disabilities (Autumn, 1992), pp. 237-249.

In this article Reiff and deFur look at transition to the workplace interventions and programs for students with learning disabilities. A concern is raised that, "the field of learning disabilities has lagged behind other disability constituencies in addressing employment and vocational concerns." (p. 239) Not only do Reiff and deFur strongly assert that more specialized transition training is necessary, they conclude that , "the evolving transition initiatives for youths with learning disabilities embody the potential for special education transition planning and services to become a model for general education transition planning." (p.248).

During the pilot LOTF years the question of specialized transition to employment training was often asked, since the emphasis then and now is for post-secondary institutions in Ontario is to focus on transition into college and university rather than into the workplace. In its final report, LOTF recommended that more emphasis be placed on transition into the workplace, but given the progress of the *Transitions* cohort, it may be that LD students do not need specialized services. In focus groups pilot students often indicated that their greatest challenge was related to education rather than work. Focus group participants cited limited work experience as a disadvantage, but both the pilot students and the *Transitions* cohort have been able to combine education and work remarkably well (see *Transitions* Trends). To this end, perhaps our cohort is displaying the very resiliency posited in the original Transitions proposal and reiterated as the central question in all subsequent reports: *Did the post-secondary pilot supports accommodate a student's learning disability in a manner specific to the educational environment, or did the supports teach transferable skills and personal resiliency in a way that allows for former pilot students to take control of and change their own lives?*

III. TRENDS RELATED TO EDUCATION

Definitions of Post-Secondary Education Status (PSE) as Defined by Statistics Canada

A **PSE Graduate** is someone who graduated from a post-secondary institution and includes both Graduate Continuers and Graduate Non-Continuers.

A **PSE Graduate Continuer** is someone who has graduated from a post-secondary institution but has chosen to pursue further education at a post-secondary institution.

A **PSE** Graduate Non-Continuer is someone who has graduated from a post-secondary institution and is no longer continuing to study at post-secondary.

A **PSE** Continuer is someone who is currently attending a post-secondary institution but has not graduated.

A **Leaver** is someone who has attended a post-secondary institution but is no longer pursuing it and has never graduated.

Definitions of terms to be used in the following sections:

Transitions Trend #1: Participants place a high value on post-secondary education. (Continuing Trend)

In 2009, 29 participants (24%) reported being in post-secondary education, with 22 of these participants having returned to post-secondary school after graduation. This figure is smaller than the 32% of participants in school in 2008 and 30% in 2007. Looking back, the current figure of 24% of participants in school is also less than the 45% in both 2004 and 2005 and 33% in 2006.

However, the 2009 data shows that eleven of our participants have graduated from 3 different programs, and 42 have graduated from two different programs. We believe this shows that participants place a high value on post-secondary education.

III. 1. General Education Statistics

As is to be expected, the number of participants in the 6th Annual Report who report that they are currently studying is lower than previous figures. In 2009, 24% of participants reported being in post-secondary education. The number of participants attending a post-secondary institution has decreased steadily since Transitions began in 2004 (45% in 2005/2006 to 30% in 2007 to 32% in 2008 to 24% in 2009). However, we find that the number of participants still in school, and especially the high number returning to school after graduation, remains significant, considering the average age of participants in 2009 is 29.94.

Seventeen participants (59%) who are enrolled in a post-secondary institution are full-time, eleven (38%) are part-time, and one is registered as a special student. Of participants studying full-time, fourteen are enrolled in University and three in a college diploma program.

Twenty-two of the participants (76%) who attend school are registered as a student with a disability at the Special Needs Office at their institution. Of these participants registered with their Special Needs Office, fourteen are full-time students. Three students who attend school full-time are not registered with their Special Needs office.

The participants who are currently studying continue to be a resourceful and high achieving group. For example, eight participants report combining studies with a full-time job, and twelve of those currently studying have part-time jobs. In addition, four participants currently studying are working at a non-paid internship or placement. This ability to combine school and work shows great resiliency and good time management skills, especially for those participants combining full-time work and studying. Participants' comments on their future plans also indicate that they are combining work and study in order to further their career ambitions in this difficult job market.

III. 2. Accommodations and Assistive Technology

Of the 22 participants currently registered at their Special Needs Office, 18 (81%) are using accommodations, while only 4 (18%) have chosen not to. This is exactly the same as the number of participants using accommodations in 2008, and slightly higher than the number of participants using accommodations in 2007, 69%.

Of the 29 participants currently studying, the number of participants using assistive technology is 15 (51%) and 14 (48%) reporting that they do not. This is similar to the 2008 figures, and we still believe that this figure seems low. The following devices were the most used:

- Kurzweil
- Inspiration

- Graphic Organizer
- Dragon Naturally Speaking
- Read/Write

III. 3. Field of Study

The following table reports the number of participants in each discipline, as compared to the fields of study data in the previous three *Transitions* reports. Arts and Social Sciences continue to be the main fields of study for Transitions participants. This year there was a significant drop in the number of participants in the field of Education.

Field of Study

| Field of Study | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------|------|------|------|------|------|------|
| Social Sciences | 36 | 19 | 8 | 5 | 8 | 11 |
| Education | 0* | 16 | 7 | 7 | 4 | 2 |
| Arts | 16 | 12 | 11 | 12 | 9 | 8 |
| Business | 13 | 7 | 9 | 1 | 3 | 3 |
| Sciences | 6 | 6 | 1 | 2 | 1 | 2 |
| Computers | 5 | 4 | 1 | 0 | 0 | 1 |
| Hospitality/Tourism | 5 | 5 | 1 | 2 | 0 | 0 |
| Engineering | 3 | 4 | 3 | 3 | 3 | 2 |
| Math | 3 | 1 | 1 | 1 | 0 | 0 |
| Healthcare/Medical | 3 | 7 | 3 | 5 | 2 | 0 |
| Architecture | 2 | 2 | 0 | 0 | | 0 |
| Trade | 2 | 3 | 0 | 1 | 0 | 0 |
| Media | 1 | 1 | 1 | 0 | 0 | 0 |
| Total | 95 | 88 | 46 | 39 | 30 | 29 |

^{*} Diplomas/degrees in the Education field were placed in the Social Sciences category in 2004

III. 4. Post-Secondary Education Continuers

Data collected about *Transitions* PSE Continuers is similar from 2007-2009 and this data is quite different from the data gathered from 2004-2006. For example, in 2006, of the 46 participants who were currently studying, 22 (48%) had not yet graduated from post-secondary education and 59% of those were still in the program they began as pilot students.

In 2008, however, only seven (27%) had not yet graduated from a post-secondary institution, and of that group only four (57%) were still in the program they began as pilot students.

In 2009, only seven currently-studying participants (24%) have not yet graduated from a post-secondary institution, and only 3 (10%) are still in the program they began as pilot students.

When asked what progress they have made toward finishing their program, the responses from the participants who are in the same program they began as pilot students were encouraging. Of the three participants, one was supposed to graduate at the time of surveying, but graduation was delayed due to a strike at York University. Another has only one more course to complete before graduation. The third participant writes: "I am slowly finishing my degree. Hopefully it will be done by 2010."

Of the four students who are still studying but who changed programs, three wrote that changing programs was the only reason they are still in school at this time. One declined to comment.

The most common reason cited by PSE Continuers over the last four years for not yet graduating is that more time is required to finish due to learning disability. In 2008, four participants agreed that more time was required for learning disability related reasons. In 2009, that number is now five participants. In 2009, one participant said changing programs has increased the amount of time necessary to be in school and one participant cited financial reasons for still being in school.

Identical with the 2008 figures, when these PSE Continuers were asked if they intended to pursue further education after graduation, an amazing six of the seven (85.7%) said they planned to return to school after graduation. This is similar to the 2005 finding of 83% and the 2006 finding of 77% and the 2007 finding of 87.5% of PSE Continuers who believed they would possibly or definitely return to post-secondary studies after graduation. This is a very high statistic, and may attest to the resiliency former pilot students have developed in this challenging aspect of their lives. It also displays both a love for and valuing of education in a population which has typically struggled with academic achievement.

One participant commented: "I would pursue further education after graduation because of love of education and because doing so will help me in future careers."

The participant who is unsure about continuing further schooling honestly writes that the job market is influencing the decision: "I am not sure at this point if I will need to, but I might

enrol in a college program for more specific job skills depending on the availability of jobs I can secure in my field."

Again, the fact that 85.7% of PSE Continuers plan to return to school, along with the fact that many have returned to school or plan to in the near future, corroborates *Trainsitions* Trend #2 from previous reports:

III. 5. Further Education Trend: PSE Graduate Continuers

In the 6th Annual Report, there are 22 PSE Graduate Continuers. In 2005, we noted that 34 participants (35%) were returning to school after graduation. In 2006, this trend continued with 24 participants (17%) returning to school after gradation. In 2007, there was a slight increase of students returning to post-secondary education, with 31 participants (31%) returning to school after graduation. In 2008, 23 participants (24.7%) have returned to school after graduation.

The Transitions figure of 24.7% of participants returning to school after graduation is slightly lower than the national trend of 36% of 2005 graduates doing so (Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005, by Justin Bayard and Edith Greenlee, 2009).

In the 5th Annual Report, we noted that the reasons for returning to school differed slightly from the previous years' findings in which the majority of participants returned to school because they required further qualifications for the job they desired. In the 5th Annual Report, 43.4% returned to school for this reason, nine participants (39.1%) responded that they wished to become more specialized in their field, two participants cited love of education as the reason for continuing and two wished to obtain higher pay in their field.

In the 6^{th} Annual Report, again the most popular reason for returning to school is that further qualifications are required to get the desired job. This year, 12 participants (54%) returned to school for this reason. This is a slight increase from 43.4% in 2008 and may be indicative of an extra-competitive job market during the recession.

Eight participants (36%) in 2009 reported they returned to school because they wished to become more specialized in their field. This is similar to the figure of 39.1% in 2008.

One participant cited love of education as the reason for continuing school and one participant returned to school to obtain higher pay in his/her field. Overall, the findings are similar from year to year. Transitions reports tend to show that the majority of former pilot students who return to school to enhance their careers in some manner. This shows a similarity between *Transitions* participants and the general population.

Of the participants who returned to post-secondary after graduation, nine participants (40%)

returned to school right after graduation, 5 (22%) returned one year after graduation, and eight participants (36%) returned more than one year after graduation. These figures differ only by 1% from the 2008 figures. Furthermore, a large number of PSE Continuers, 9, intend to graduate in 2009. Two intend to graduate in 2010, 4 in 2011, one in 2012, and one (the participant who chose "love of education as the reason for remaining in school) will graduate in 2020.

In the 6^{th} Annual Report, 59% of PSE Continuers intend to return to school after graduation. This is similar to the 2006 figure of 50% and the 2007 figure of 52%. However, in 2008, only 43% intended to return to school after graduation. We believe this figure can be attributed either to survey attrition or perhaps participants have simply reached their final education goals. With the 2009 figure more closely mirroring the figures from 2006/2007, we can safely assume that last year's decrease was due to survey attrition, and now that participation has increased back to 123 participants this figure is again high.

It is also worth noting that 4 participants who wish to return to school after graduation intend to pursue PhD's, two of whom have already applied to PhD programs this year. In addition, three are intending to complete bachelor's of education and one is intending on law school. These students show a high level of motivation.

In conclusion, PSE Graduate Continuers, in their comments, really show their love of higher education. One participant, writing about possibly continuing studies in the future, wrote "I have no idea what I would study, but I'll never say no to learning." Another writes that "my field is always changing, so educating myself will never end."

III. 6. Post-Secondary Education Leavers

In the Intake survey, we observed that 22 (10%) of all *Transitions* participants left their programs without graduating, which was notably lower than in the general population at 15%. In the second phase of the *Transitions* study, the percentage of PSE Leavers in our population dropped to 18 (9%) and it dropped in 2006 again to 10 (7%) of 141 participants and in 2007, 11 (9%) of 119 participants were PSE Leavers. In 2008, that decreased even further, with only four (4.3%) of 93 participants leaving school without graduating.

In 2009, 11 (9%) of 123 participants left school without graduating. This year's figure is similar to the 2006/2007 figures of 7% and 9%, but markedly different from the 2008 figure of 4.3%. We attribute this increase to having only 93 participants complete the survey in 2008 and 123 in 2009.

Again, the fact that only 9% of all participants left school without graduating corroborates *Transitions* Trend #2 from previous reports:

Transitions Trend #2: Transitions participants have a higher than average retention rate than the general population in post-secondary education. (Continuing Trend)

As in previous years, PSE Leavers were asked to select their reasons (they could select more than one) for not finishing their program of study from the categories below. This year's figures are as follows:

- did not enjoy what I was studying 3 (27%)
- financial concerns -3 (27%)
- cannot decide what career to pursue -1 (9%)
- found part-time employment -0
- found full-time employment -2 (18%)
- could not pass all the required courses to obtain degree/diploma/certificate 8 (72%)

The inability to pass required courses remains the most common reason Transitions participants do not graduate. This corroborates *Transitions* Trend #3 from the 2007 Report.

Transitions Trend #3: Transitions PSE Leavers cite inability to pass required courses as the most common reason for not graduating. (Continuing Trend)

PSE Leavers were asked if they wanted to graduate from the program they began as pilot students. Four participants answered "yes" and seven answered "no."

Participants were asked if they are planning to return to school in the future. Three participants answered "yes" and eight answered "no." Of those participants who answered in the affirmative, all three had definite answers for what they want to study; one wishes to be a Law Clerk or stud Law and Security, another wishes to do a Political Studies General BA, and the last wishes to study Office Administration.

These three participants were asked what they feel they need to do to ensure that they successfully graduate. One participant wrote that she would like childcare and time to study, another "time and money", and the last career guidance.

Of the eight who do not wish to continue their studies, three cite work as the reason for not continuing school. The rest of the answers were more complicated. One participant wrote that he is just unsure about what he wants to do and "would go back to school if I found something that I wanted to do as well as if I knew that I would have help." Another wrote "I feel burned out after being in school for 8 years." One participant cites that health complications keep him from returning to school and another writes: "I suspect the level of support required would not be there. I am basically afraid of failure."

III. 7. Graduation

When *Transitions* participants were first surveyed in 2004, 115 had graduated from an Ontario post-secondary institution. In 2005, 124 had graduated. In 2006, 109 participants had graduated, and in 2007 100 had graduated. In 2008, 82 participants had graduated – a decrease in numbers that we again attribute solely to survey attrition – and in 2009, 105 participants have graduated.

"Primary" Graduation Statistics

As established in the *Third Annual Report*, participants who have graduated for the first time will be referred to as having graduated with a "primary" degree/diploma/certificate.

This year forty-two participants graduated once, returned to school, and have recently graduated with another degree/diploma/certificate and will be referred to as having graduated with a "secondary" degree/diploma/certificate. Eleven participants have graduated from three programs, and will be referred to as having graduated with a "tertiary" degree/diploma/certificate.

Of the fifty-two primary graduates, fourteen graduated with degrees, thirty-four with diplomas and four with certificates.

"Secondary" Graduation Statistics

Of the forty-two "secondary" graduates, the highest number, 15, graduated with two degrees. Seven participants have earned a degree and a diploma. Three participants have earned a degree and a certificate. Eight participants have earned two diplomas, six have earned a diploma and a certificate, and finally three participants have earned two certificates.

"Tertiary" Graduation Statistics

Of the 11 "tertiary" graduates, three participants have earned a combination of degrees, diplomas and certificates. Three have earned a combination of degrees and a diplomas. Three have earned two diplomas and a certificate. One has received three university degrees and one has earned a combination of degrees and college certificates.

III. 8. Studying and working concurrently

In 2008, all thirty participants who were currently in school combined school and work in some manner. This figure was much higher than the 2005/2006/2007 figures of 53%, 65% and 62%.

In 2009, 25 of the 29 participants (86%) who are currently studying are also working. Six of these participants are working full-time (24%) and fifteen are working part-time (60%). Four have non-paying internships or placements (16%) (Non-paying internships and placements are not included in the Employment section of this report. Therefore, the number of participants who combine *paid* work and study in the Employment section of this report is 21).

Those employed part-time while studying work an average of 13 hours per week and those working full-time while studying work an average of 40 hours per week. Because this year's Transitions statistics are higher than the figures for the general population (See Sandra Franke. "School, work and the school-work combination by young people." p. 48) we still feel we are again able to assert that *Transitions* Trend #4 is a continuing trend.

Transitions Trend #4: Transitions participants combine post-secondary education and work reasonably well. (Continuing Trend)

III. 9. Living Arrangements

All previous *Transitions* reports have noted that a very high percentage of our participants live with parents or other family members. In 2004, 49% of participants lived at home, and in 2005 that number had dropped to 39%. In 2006, 44% lived at home and in 2007 29% lived at home. In 2008, 28 participants (30%) lived at home. In 2009, 33 participants (27%) live with their parents or other family members.

This percentage remains high relative to the general population where, according to *Time* magazine, only 20% of adults of a similar age live at home, a percentage that has risen from 11% in 1970 (Grossman, Time, Jan 16, 2005). In Ontario, the reported number of individuals aged 22-29 living at home is 36.2% (PACFOLD, Ontario, age 22-29, 1).

However, our *Transitions* population figure of 27% living at home is significantly smaller than the LDAC figure of 54.4% of Ontario residents aged 22-29 with learning disabilities who currently live at home (PACFOLD, Ontario, age 22-29, 1).

We asked participants who were living at home to elaborate on their reasons for that choice. Participants were asked to choose one of the following options which applied most directly to their situation and to elaborate in a comments section.

- Financial reasons
- Cultural reasons
- Still dependent on parents (emotionally, etc.)
- Parents are dependent on you (i.e. taking care of a parents)
- Preferred living arrangement at this time

In 2009, twenty-six participants who live at home (78%) responded that they live at home for financial reasons. This is more than the 2007 figure of only 47% who said they lived at home for this reason, but lower than 86% in 2008. In previous years, living at home has been the preferred living arrangement of most participants, however, in 2008 only nine participants (32%) cited this reason. In 2009, 17 participants (51%) live at home because it is their preferred living arrangement. (Note: participants could select more than one answer in 2009).

Similar to previous years, only five participants report that they are still dependent on their parents, one lives at home for cultural reasons, and two have parents who are dependent on them. The above figures again corroborate *Transitions* Trend #5:

Transitions Trend #5: A high percentage of Transitions participants are living with their parents or other family members. (Continuing Trend)

The remaining 90 participants (73%) reported on their current living arrangements as follows: 52 (42%) are living with their spouse/partner, 18 (15%) are living alone, 13 (10.5%) are living with friends, three (2%) are living with children, and three (2%) are living in residence.

(Note: in 2008 participants could choose between "living with their spouse/partner" and "living with their spouse/partner and children." In 2009, the latter has been removed. It is worth noting that in 2008, 24% of participants lived with their spouse/partner, and 12% lived

III. 10 Financial Issues

Transitions Trend #6: Financial concerns are impacting on Transitions participants' life decisions. (Continuing Trend)

For students today, student-debt impacts their lives after graduation. A Profile of the Class of 2005 revealed half of all graduates in 2005 who did not pursue further education had some form of student debt upon graduation. Despite this high number of graduates in debt, about a quarter had paid off their overall debt two years after graduating despite average debt loads exceeding \$20,000. Master degree graduates had the highest proportion (32%) that had paid off their student related debt (both government and non-government), followed by doctorate (30%), bachelor (28%), and finally college graduates (24%). (Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005, Justin Bayard and Edith Greenlee, p.31) Like graduates in the general population, *Transitions* participants report being in debt.

Participants were asked the question "Have you ever had student loans?" In 2005, 51% of participants reported that they had accumulated student debt, 34% of whom had accumulated a debt of \$20,000 or more. In 2006, we probed the question of student debt further and discovered that 64% reported having debt from student loans, in 2007, 45% reported having debt from student loans, and in 2008, 57 participants(61%) reported having had student loans, and 46% reported still being in debt from those loans.

In 2009, 73 of 123 participants (59%) report having had student loans, and 53 of 123 (43%) report still being in debt from student loans.

The table on the following page details the amount of participant debt by year.

Percentage of Participant Debt by Year

| Amount of Student Debt | % in Debt in 2005 | % in Debt in 2006 | % of Debt in 2007 | % of Debt in 2008 | % of Debt in 2009 |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Under \$5000 | 15% | 17% | 7% | 8.6% | 7 (13.5%) |
| \$5000 - \$10,000 | 17% | 17% | 13% | 15% | 6 (11.5%) |
| \$10,000 - \$15,000 | 15% | 13% | 17% | 10% | 8 (15.4%) |
| \$15,000 - \$20,000 | 19% | 17% | 5% | 2% | 3 (5%) |
| \$20,000 - \$25,000 | 7% | 4% | 9% | 17% | 5 (10%) |
| \$25,000 - \$30,000 | 9% | 14% | 15% | 7% | 5 (10%) |
| \$30,000 - \$40,000 | 10% | 7% | 11% | 13% | 11 (21%) |
| \$40,000 - \$50,000 | 4% | 8% | 7% | 9% | 1 (1.9%) |
| Over \$50,000 | 4% | 4% | 15% | 17% | 6 (11.5%) |
| # participants in Debt | 100 participants | 71 participants | 54 participants | 46 participants | 52 participants* |

^{*}One participant in 2009 did not write the amount of student debt. Percentages are calculated out of 52.

Participants' debt load seems to fluctuate every year depending on the number of participants in the survey and the number of participants in school. In 2009, 44 participants responded that their student debt prevents them from enjoying the lifestyle they want. In particular, many participants responded that their after tax income is divided between rent and student loans and little money remains for savings or enjoyment. Many report working more than one job in order to pay back their loans. Others respond about money-related stress.

Some participant comments about debt are positive in tone and show them working toward reducing their debt in the future: "While my career so far has not exactly turned out the way I had planned, I'm finally reaching the point that I can afford debt payments while also enjoying a few luxuries. I may not have much in the way of luxuries, but I'm at least grateful for what I do have."

Debt comments also reflect the many difficulties our participants are facing and have recommendations for the future: "The present debt of \$50,000 is quite significant, and it is always in the back of my mind. Even when I need credit in my life for anything from buying a car to buying a home, the bank looks at his debt as a negative rather than a positive. This debt prevents me from moving forward in my life, and because it took me longer than a regular student to complete my studies because of my disability, I have a higher debt ration than most...It would be good for students with disabilities to have a forgiveness on some or most of the debt upon graduation from their program, and assistance with payment of loans if their field of study does not pay the salary they expected."

Some participant comments about student debt are bleak: "I pay more in student loans then I do for my mortgage and house bills. I pretty much don't do anything because of my debt."

One participant sums up the general frustration nicely: "Almost \$600 a month goes towards paying off my student loans. I find it hard to start savings for RRSPs or for personal wants. It is frustrating to know that a large percentage of your earnings are going towards paying off student loans."

III. 11. Preparation for Employment

In the 2008 survey, we asked participants who were not currently studying and who had graduated from a post-secondary institution if they felt prepared to seek employment after graduation. In 2009, 67 of the 83 participants (80%) who have graduated and are not studying felt prepared to seek employment. This is higher than the 2008 figure of 69%, and also higher than the 2007 and 2006 figures of 74% and 75%. The 2009 data again corroborates *Transitions* Trend #7 in this year's report.

Transitions Trend #7: The majority of Transitions participants, upon graduation, feel prepared to seek employment. (Continuing Trend)

Participants were given space to comment about this question and, similar to the past three years, despite the fact that so many said they felt prepared to seek employment, the comments were quite mixed.

In many cases, former students were highly complimentary to career services and disability services at their school for helping them with the transition from school to work. One student writes that "my career prep course was helpful." Another writes: "With the help of the Glen Crombie Center for Special Needs, I was able to succeed in my studies. I would not have been able to do it if it were not for Susan Alcom McKay and her excellent staff who were there with me every step of the way."

Many students were specifically enthusiastic about Bachelor of Education programs. One participant writes: "I found that teacher's college and having friends who went through the process helped a lot in getting me ready to apply for teaching jobs, plus there were workshops and advice from others."

Some students credit returning to school for further qualifications with helping the transition to the job market. "After university, I was not ready or prepared to seek employment, but the extra 2 years in college helped to give me direction and gave me more confidence in my abilities."

Some participant comments were about difficulty finding a job in their field. One participant, who is trained as an Educational Assistant, writes "There are no full-time jobs, only sub jobs. And I make more at my full-time job at Tim Hortons then I would as a substitute Educational Assistant."

Of the 16 participants who did not feel their post-secondary education prepared them for the job market, many commented that they needed additional skills outside of school in order to find a job. One participant writes:

"When I graduated I didn't have high marks or a good portfolio, so I volunteered for a while to build it up while I worked part-time and fruitlessly looked for full-time work."

Others noted that their programs themselves did not provide them with enough work-related experience that would facilitate a quick transition to working life: "there was never a co-op part of the program which would have really helped me to find a job somewhere in an office environment." Another wrote: "No, as there was no practical work or co-op program I could be involved in and job selection was quite competitive in computer programming...."

Participants are often also struggling with problems not related to school or work like accidents, emotional problems, family issues and so on. Many wrote that complications like these have taken time away from performing an adequate job search.

IV. TRENDS RELATED TO EMPLOYMENT

Please note: Information on the general population outlined in the Employment section of this report comes from three major sources. The first is the National Graduates Survey (NGS). This longitudinal study measures the labour market success of graduates from Canadian Universities and Colleges two and five years after graduation. The class of 2005, surveyed initially at the time of graduation, returned results in 2007 about education, employment, debt, and living arrangements. This is the most current National study about the transition from school to work as of the date of this report. In previous *Transitions* reports, the NGS statistics from the class of 2000, who returned results in 2002, were used. In certain cases where comparison between *Transitions* reports is necessary, figures from the 2002 and 2007 NGS will be used.

At the provincial level, the 2009 Ontario University Graduate Survey with information about the class of 2006 and the 2006-2007 Employment Profile of College Graduates, released in 2009, are the most recent reports on the transition from school to work.

IV. 1. Salary and Transitions Participants

In Canada, only 47.5% of disabled individuals are employed. Persons with disabilities are, "more than twice as likely not to be working (either unemployed or not in the labour force) as those without disabilities" (Kunin, "Literature Review on the Impact of Post-Secondary Education on Labour Market Attachment for Persons with Disabilities." p. 6). The average salary of a disabled individual in Canada is \$30,200 annually, compared with \$34,700 as the annual salary of a member of the general population (Kunin 6).

In the light of these Canada-wide statistics, *Transitions* participants have consistently been doing extraordinarily well in the labour market. In our *First Annual Report* we recorded 121 of 210 (58%) of participants were employed and in the *Second Annual Report*, 142 of 196 (72.4%) were employed. In the *Third Annual Report*, 112 of 141 (79.4%) participants were employed. In the *Fourth Annual Report*, 98 of 119 (82%) participants were employed. In the *Fifth Annual Report*, 80 of the 93 (86%) *Transitions* participants were employed.

In this year's report, 99 of the 123 (80%) participants are employed. Given the Canadian population average percentage of employment and the historical difficulties of persons with learning disabilities, this remains a significant achievement!

This is also a very high percentage when compared to the 2001 Census data for Ontario wherein only 40.5% of individuals age 22-29 with learning disabilities were employed. The Transitions employment rates in 2007, 2008 and 2009 are actually higher than the general population employment rate for Ontario in the 2001 Census, which reported 78.6% individuals in that demographic were employed (Census data as cited in PACFOLD, Ontario, age 22-29, p. 3).

The following are highlights from our recent employment data. Figures are calculated out of the total number of participants:

- combine work and school: 21 (17%)
- are no longer in school and employed full-time: 61 (49.5%)
- are no longer in school and employed part-time: 17 (14%)
- are no longer in school and unemployed: 16 (13%)
- currently studying and not working: 8 (6.5%)

In comparison with the employment statistics from previous reports, some changes can be reported. In 2007, 26 participants combined work and school and in 2008 that figure was 25. This year, 21 participants combine work and paid employment, but if non-paid internships/ placements are included, the number of participants who combine work and school is 25. This is on par with the numbers from previous reports.

There was an increase in participants working full-time from 65 in the Second Annual Report, to 72 in the Third Annual Report to 59 in the Fourth Annual Report. In the Fifth Annual Report in 2008, 43 participants were working full-time. This year, in 2009, 61 participants are working full-time.

The number of participants who are working part-time has fluctuated between each report. Eighteen participants worked part-time in 2005, 10 in 2006, 13 in 2007 and 12 in 2008. This year 17 participants work part-time.

Until this year, there had been a consistently significant decrease in the number of participants who are no longer in school and who are unemployed, 31 in the First Annual Report, 19 in the Second Annual Report, 13 in the Third Annual Report, 8 in the Fourth Annual Report, and 7 in the Fifth Annual Report. This year, in 2009, 16 participants are no longer in school and unemployed.

We have again chosen to discuss primarily the salaries of participants who are working fulltime and not studying, as they currently represent those who have made the fullest transition to the workplace – PSE Graduate Non-Continuers and PSE Leavers. This population makes up 50% of currently employed *Transitions* participants.

Salary Ranges for participants no longer studying working full-time

| Annual Salary Range full-time | # | % |
|-------------------------------|----|-----|
| Less than \$5000 | 3 | 5% |
| \$5000 - \$10,000 | 1 | 2% |
| \$10,000 - \$15,000 | 2 | 3% |
| \$15,000 - \$20,000 | 3 | 5% |
| \$20,000 - \$25,000 | 4 | 7% |
| \$25,000 - \$30,000 | 8 | 13% |
| \$30,000 - \$35,000 | 9 | 15% |
| \$35,000 - \$40,000 | 5 | 8% |
| \$40,000 - \$45,000 | 5 | 8% |
| \$45,000 - \$50,000 | 5 | 8% |
| \$50,000 - \$60,000 | 11 | 18% |
| Over \$60,000 | 5 | 8% |
| Total: | 61 | 98% |

In order to better gage the financial status of our participants, in the second survey we reduced the salary range on the survey to \$5000 increments from \$15,000 increments in the Intake survey. However, in the third and fourth surveys, we asked participants to state their actual gross salary. This increased our ability to compare *Transitions* participants with the general population, but makes it difficult to compare salaries between years. Thus, to facilitate comparison, the below chart is a comparison of salary ranges at the broadest level, using the \$15,000 increments from the *First Annual Report* done in 2004.

Comparative Salary Ranges 1st-5th Annual Reports for full-time workers

| Salary Ranges | 2004 % | 2005% | 2006% | 2007% | 2008% | 2009% |
|---------------------|--------|-------|-------|-------|-------|-------|
| Less than \$20,000 | 21% | 26% | 13% | 17% | 7% | 15% |
| \$20,000 - \$34,999 | 48.5% | 45% | 50% | 39% | 40% | 35% |
| \$35,000 - \$49,999 | 23% | 23% | 27% | 17% | 30% | 21% |
| \$50,000 - \$64,999 | 7.5% | 5% | 7% | 20% | 16% | 18% |
| \$65,000 - \$89,000 | 0 | 0 | 3% | 7% | 7%* | 8%* |
| Total | 100% | 99% | 100% | 100% | 100% | 98% |

^{*} All five participants earning over \$60,000 on the previous chart fall into this category in 2007, 2008 and 2009.

This general comparison shows a marked improvement in the *Transitions* population from year to year. The number of participants working full-time and earning less than \$20,000 annually has, mostly, decreased over time with the exception of an increase in 2007 and 2009. However, the number of participants earning in the \$50,000 - \$64,999 salary range has increased significantly over the years.

Though the number of *Transitions* participants working full-time and their salaries have mostly risen year by year, it was only last year that we stated *Transitions* participants were earning salaries equal to those in the general population. We chose to say this based on this logic:

"This year [2008], due to the marked decrease in the number of participants earning less than \$20,000 annually - from 17% in 2007 to 7% in 2008 - and the increase in the number of participants earning in the higher wage brackets - in particular, the 30% earning between \$35,000 - \$49,999 annually - we are happy to say that *Transitions* participants are this year on par with the general population."

We cannot make this same claim again in 2009 because the number of participants earning less than \$20,000 annually has returned to about 2006 rates, between 13%-15%. Perhaps we can safely speculate that the decrease shown in 2008 was a result of survey attrition. With participant numbers back to 123 participants in this year's survey, we think this year's figures more accurately reflect the status of *Transitions* participants.

That is not to say that our participants are not doing well, if not extremely well in some cases. That is simply to say that we are still unable to accurately say that they are "earning salaries equal to those in the general population."

Our benchmark for the success of our participants has traditionally been as follows: in 2002, the median earning for university graduates two years after graduation was \$39,000, and \$31,000 for college graduates. Furthermore, the national 25th percentile of college graduates in 2002 earned \$24,000 annually, and the national 25th percentile of university graduates earned \$31,000 annually (Allen "Class of 2000" p. 31). These 2002 figures have been our point of comparison with the general population until this year, when a new study released these findings: In 2007, the national median earning for university graduates two years after graduation is \$45,000 and \$35,000 for college graduates. The national 25th percentile of university graduates earns \$35,900 annually, and the national 25th percentile of college graduates earns \$27,500. (Bayard, "Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005, 2009. p. 59)

With a full 15% of *Transitions* participants earning significantly less than both the national 25th percentile and the national median earnings for both college and university graduates, in 2009, we are again unable to say they were earning salaries comparable to the average salaries in the general population.

Last year we had reported *Transitions* Trend #8 as an "Ending Trend". However this year we must restore its status to "continuing".

Transitions Trend #8: Transitions participants have lower salaries and are under-employed compared to the general population. (Continuing Trend)

When these *Transitions* salary figures are compared with the statistics for Ontario residents aged 22-29 with learning disabilities, we see that our *Transitions* population is doing extraordinary well salary-wise. The LDAC report notes that of this demographic, 41.2% are unemployed, 26.3% earn between \$1 – 9999 annually, 32.5% \$10,000 or more (PACFOLD, Ontario, age 22-29, 3). That 72% of employed *Transitions* participants are earning salaries of at least \$20,000 or more annually, reveals what can happen when a learning disabled population in Ontario is given the resources to succeed in school and thus in the job market. This year, we happily corroborate *Transitions* Trend #9 from the *Fifth Annual Report*.

Transitions Trend #9: Compared to other Ontario residents aged 22-29 with learning disabilities, Transitions participants have a high rate of employment and good salaries. (Continuing Trend)

In order to have a clearer picture of how each segment of the employed *Transitions* population is faring in relation to the general population, it is necessary to separate employed participants into PSE Leavers and PSE Graduate Non-Continuers who are employed full-time, as was done in the previous four *Annual Reports*.

IV. 2. Post-Secondary Education Leavers

In the *First Annual Report*, we noted that only 22 (10%) of *Transitions* participants had left their programs of study without graduating. Similarly, in the *Second Annual Report* we noted that only 18 (9%) of participants were PSE Leavers. Similarly, the *Third Annual Report* noted that 10 (8%) of participants were PSE Leavers. In the *Fourth Annual Report* there were only 11 (9%) PSE Leavers. In the *Fifth Annual Report* there were only four (4%) participants who left their programs without graduating. Thus, we concluded in each year that our *Transitions* population had a lower post-secondary attrition rate than the general population, which is 15% (Allen "YITS" pp. 6-9).

In 2009, only 11 of 123 (9%) participants are PSE Leavers, four of whom are employed full-time and four part-time. Three PSE Leavers are unemployed.

In the general population, PSE Leavers are most likely to be male. However, in past reports we

noted that this trend is reversed in the *Transitions* population, with 59% of Leavers being female in 2004 and 61% in 2005. This was the case in 2006, where 50% of Leavers are male and 50% female. In 2007, six Leavers were female, and five were male. In 2008, three are female and one is male. This year, 8 (72%) are female and three (27%) are male.

The number of PSE Leavers is returned to a pre-2008 level this year, and we believe this is due to increasing the number of participants doing the survey to 123. Again, despite only 11 of 123 participants being PSE Leavers, it is still useful to look briefly at the salaries of full-time employed *Transitions* PSE Leavers.

There are 8 PSE Leavers who are employed in 2009. Of those, four work full-time and four work part-time. Seven are female and one is male.

One male working 44 hours per week earns \$20,228 per year. Of the three full-time employed females, one works 55 hours per week and earns \$41,675 per year. Another works 41 hours per week and earns \$18,000 per year. Another works 40 hours per week and earns \$25,000 per year. The last works 40 hours per week and earns \$20,000 per year. Though these salaries are low considering the number of hours worked, only the woman earning \$18,000 a year considers herself under-employed. She did not comment.

One woman who does not consider herself under-employed declined to comment. The other two wrote:

"Medical conditions prevent me from reaching my full potential."

"I have the experience necessary but do not want to go any further right now."

The male PSE Leaver, who may be considered under-employed because of a low annual salary, writes that he does not feel underemployed because "my job is different everyday."

In 2008 it was difficult to confirm or deny Transitions Trend #10 because only two participants were PSE Leavers that year. However, for the time being, and taking participant's personal feelings about under-employment into account, we will hesitantly confirm Transitions Trend #10 for another year.

Transitions Trend #10: PSE Leavers employed full-time are generally earning salaries that are comparable to graduates in the general population. (Continuing Trend)

IV. 3. PSE Graduate Salary Statistics

Of the 99 graduates in 2009, 70 are currently employed. Fifty-six are employed full-time and 14 are employed part-time. Thirteen graduates are unemployed. Twenty-two graduates returned to school.

The 2009 figure of 56 of 70 (80%) graduated participants employed full time is the highest ever in a Transitions report. In 2008, that figure was 50%, the 2007 figure was 53%, the 2006 figure was 68% and the 2005 figure was 61%. This may be indicative of a successful school-to -work transition for our participants.

As salary is what is being assessed in this section, the question of where to place those who have graduated with a secondary or tertiary degree/diploma/certificate was again raised. We have decided to rank those with secondary and tertiary qualifications by the qualification that typically results in the highest paying job, beginning with degree, and moving to diploma, and certificate. Thus, if a participant graduated first with a diploma and then with a degree, for salary purposes, they are in the degree category. However, if someone graduated with a degree and then received a certificate, though those extra qualifications will no doubt be helpful for getting a job, the salary will still be assessed by the qualification that statistically pays the most, a degree.

PSE Graduate Figures by Qualifications

| Graduates | Degree | % | Diploma | % | Certificate | % | Total | % |
|------------------------|--------|---|---------|---|-------------|---|-------|---|
| In school | 12 | % | 8 | % | 2 | % | 22 | |
| Employed full- time | 27 | % | 28 | % | 1 | | 56 | % |
| Employed part-time | 6 | % | 6 | % | 1 | % | 13 | |
| Unemployed | 1 | % | 10 | % | 2 | % | 13 | % |
| Total | *45 | % | 52 | % | 6 | % | 103 | % |

^{*} one university graduate did not specify full-time or part-time work

IV. 4. PSE Graduate Non-Continuer Salary Statistics

As in past Annual Reports, we feel that the salaries of PSE Graduate Non-Continuers working full-time are the best indicator of the success of *Transitions* participants in the workplace.

Annual Salaries of Full-time PSE Graduate Non-Continuers

| Annual Salary Range full-time | University Grads | % | Diploma | % | Certificate | % |
|-------------------------------|---------------------|------|---------|------|-------------|------|
| Less than \$5000 | 0 | 0 | 1 | 3.5% | 1 | 100% |
| \$5000 - \$10,000 | 1 | 4% | 1 | 3.5% | 0 | % |
| \$10,000 - \$15,000 | 1 | 4% | 1 | 3.5% | 0 | o |
| \$15,000 - \$20,000 | 1 | 4% | 1 | 3.5% | 0 | 0 |
| \$20,000 - \$25,000 | 1 | 4% | 1 | 3.5% | 0 | 0 |
| \$25,000 - \$30,000 | 3 | 11% | 4 | 14% | 0 | 0 |
| \$30,000 - \$35,000 | 5 | 18% | 5 | 18% | 0 | 0 |
| \$35,000 - \$40,000 | 1 | 4% | 3 | 11% | 0 | 0 |
| \$40,000 - \$45,000 | 0 | 0 | 4 | 14% | 0 | 0 |
| \$45,000 - \$50,000 | 4 | 14% | 1 | 3.5% | 0 | 0 |
| \$50,000 - \$60,000 | 8 | 30% | 3 | 11% | 0 | 0 |
| Over \$60,000 | 2 | 7% | 3 | 11% | 0 | 0 |
| Total full-time: | 27 | 100% | 28 | 100% | 1 | 100% |

In order to analyze PSE Graduate Non-Continuers properly, this group has been divided into categories, similar to the previous Annual Reports:

- University versus College Graduates
- Field of Study
- Gender

University Graduates

It continues to be the case that in the general population university graduates have higher earnings, despite both college and university graduates being equally likely to find work upon graduation. The national median annual earnings of a bachelor graduate is \$45,000 (Bayard, Class of 2005, p. 21). In Ontario, six months after graduation in 2006, the average annual salary for graduates of undergraduate degree programs was \$41,699 (OUGS 2009). As reported in the chart below, 45% of *Transitions* participants are under-employed when compared to their peers in the general population because they are earning salaries below \$45,000 - \$50,000 annually.

It is again worth noting, however, that when compared with Ontario residents with learning disabilities ages 22-29, our *Transitions* population of university graduates far exceeds the highest salary figure listed in the LDAC report: 32.5% of individuals with learning disabilities in this demographic earn over \$10,000 annually, 26.3% earn \$1-\$9999 annually, and 41.2% are unemployed. The successful salaries of *Transitions* university graduates is testament to what can happen when a highly intelligent population is given the tools for success in school that directly translate to labour market success.

Salary of Full-time University Graduates

| Annual Salary Range full-time | University Graduates | % |
|-------------------------------|----------------------|------|
| Less than \$5000 | 0 | 0 |
| \$5000 - \$10,000 | 1 | 4% |
| \$10,000 - \$15,000 | 1 | 4% |
| \$15,000 - \$20,000 | 1 | 4% |
| \$20,000 - \$25,000 | 1 | 4% |
| \$25,000 - \$30,000 | 3 | 11% |
| \$30,000 - \$35,000 | 5 | 18% |
| \$35,000 - \$40,000 | 1 | 4% |
| \$40,000 - \$45,000 | 0 | 0 |
| \$45,000 - \$50,000 | 4 | 14% |
| \$50,000 - \$60,000 | 8 | 30% |
| Over \$60,000 | 2 | 7% |
| Total full-time: | 27 | 100% |

Despite the fact that *Transitions* university graduates are under-employed when compared with the general population, this group's salaries have increased annually over the course of the

longitudinal study. In the First Annual Report, we noted that the highest percentage of university graduates was earning less than \$20,000 annually. In the Second Annual Report we noted that the highest percentage was earning \$15,000 - \$20,000 annually. The 2006 figure of 46% of university graduates earning \$25,000 - \$35,000 annually was a marked improvement in this population. In 2007, the highest percentage of participants, 32%, earned between \$20,000 - \$25,000 annually. In 2008, 25% were earning between \$50,000 - \$60,000.

This year, the highest percentage of university graduates is again earning between \$50,000-\$60,000!

There has been an increase in the number of university graduates who can be said to be extremely under-employed. This year the figure is 12% - meaning 12% earn less than \$20,000 annually. In 2008 that number was only 4%, in 2007 it was 12%, and in 2006 it was 15%. We believe that because this figure is similar to the 2007 number, it may be attributed to increasing the number of participants in the survey to 123 this year.

In the Fourth Annual Report we noted that in 2007 ten university graduates were earning salaries higher than the general population average for university graduates, which was an increase of six since 2006. In 2008, we noted that twelve participants were earning salaries above \$39,000 annually. We would like to again focus on the fact that fourteen participants are earning salaries higher than \$39,000 annually. We would like to specifically highlight the eight participants who are earning salaries between \$50,000 - \$60,000, an increase of two people since 2007. These eight participants are earning salaries higher than the median earnings of graduates in the general population, \$45,000 In addition, two participants are now earning above \$60,000 annually, which is an increase of one person since 2007.

We indicated in the first four Annual Reports two factors that we believed influenced low salaries of *Transitions* university graduates. The first factor was that the national salary figures we compare our population with were figures reported for two years after graduation. We estimated that many of our graduates were earning low salaries due to just entering the work force. This may indeed have been the case. However, this year, sixteen of our participants have been with their current employer for more than two years and have been finished their studies for at least two years. This is an increase of eight participants since 2008.

Here is a breakdown of the years worked and wages earned of those sixteen participants:

- 7 years Two people, \$57,000, \$34,000
- 5.5 years One person, \$30,000
- 5 years Two people, \$45,000, \$74,000
- 4 years Four people, \$52,000, \$48,000, \$31,000, \$30,000
- 3.5 years One person, \$52,000
- 3 years three people, \$52,000, \$26,000, \$23,000

- 2.5 years one person, \$45,000
- 2 years two people, \$58,000, \$50,000

In addition, wages have been increasing in high-knowledge industries, but not increasing in low-knowledge industries. Thus, lower earnings also depend on the type of work being performed by graduates.

The second factor we indicated as having an influence on the low salaries of our graduates was field of study. Field of study might have something to do with these low salaries, and will be analyzed after first looking at the salary rates of college graduates.

For a qualitative and subjective perspective of university graduates we asked participants whether or not they consider themselves to be under-employed. We defined underemployment as being employed at a level lower than your education and work experience warrants. Four university graduates working full-time consider themselves under-employed. One participant who has been with his current employer for 3 years writes: "My career is not progressing at all. My coworkers have no post secondary education."

One participant who feels under-employed, and works 40 hours a week for \$34,000 annually, comments: "I was in a car accident and took 2 years off of work. Due to the gap in my resume I have had to start over. If I didn't have my accident I think I would have been farther ahead."

Twenty-three university graduates do not consider themselves under-employed. Many participants write that they have the job their education prepared them for. Many seem to genuinely love their jobs. One participant writes: "there is room to grow and learn and my job is changing so I am learning new things constantly."

One participant who earns \$60,000 a year comments: "Based on my work experience, education, and current professional standing I would say I am not underemployed as my current employment is consistent with others based on those factors as presented to me in the CGA salary survey."

College Graduates

While the national median annual earnings of a bachelor graduate is \$45,000 annually, the national median for college graduates was \$35,000 (Bayard, Class of 2005, p. 59). The average earning for someone with who earned a college degree in Ontario 2006-2007 was \$30,303 (2006-2007 *Employment Profile*). In 2009, 86% of *Transitions* college graduates are earning the average annual salary for the general population or above.

It is again worth noting, however, that when compared with Ontario residents with learning disabilities ages 22-29, our *Transitions* population of college graduates far exceeds the highest salary figure listed in the PACFOLD report: 32.5% of individuals with learning disabilities in this demographic earn over \$10,000 annually, 26.3% earn \$1-\$9999 annually, and 41.2% are unemployed. The successful salaries of *Transitions* college graduates is testament to what can happen when a highly intelligent population is given the tools for success in school that directly translate to labour market success.

As demonstrated in the chart below, 14% of participants with diplomas who are working full-time are earning less than the average in the general population, with four participants earning less than \$20,000 annually. This is less than the 2008 and 2007 figure of 22%.

However, the majority of participants with college diplomas, 24 (86%) are earning the average salary for the general population or above. This figure is much higher than in the *Second Annual Report*, where 50% were earning in that salary range as well as in the *Third Annual Report* where 59% were earning in that range. This is also exceeds the *Fourth Annual Report* and *Fifth Annual Reports* where 77% were earning in that range.

Salary of full-time college graduates

| Annual Salary Range full-time | Diploma | % | Certificate | % |
|-------------------------------|---------|------|-------------|------|
| Less than \$5000 | 1 | 3.5% | 1 | 100% |
| \$5000 - \$10,000 | 1 | 3.5% | 0 | % |
| \$10,000 - \$15,000 | 1 | 3.5% | 0 | 0 |
| \$15,000 - \$20,000 | 1 | 3.5% | 0 | 0 |
| \$20,000 - \$25,000 | 1 | 3.5% | 0 | 0 |
| \$25,000 - \$30,000 | 4 | 14% | 0 | 0 |
| \$30,000 - \$35,000 | 5 | 18% | 0 | 0 |
| \$35,000 - \$40,000 | 3 | 11% | 0 | 0 |
| \$40,000 - \$45,000 | 4 | 14% | 0 | 0 |
| \$45,000 - \$50,000 | 1 | 3.5% | 0 | 0 |
| \$50,000 - \$60,000 | 3 | 11% | 0 | 0 |
| Over \$60,000 | 3 | 11% | 0 | 0 |
| Total full-time: | 28 | 100% | 1 | 100% |

In our Second Annual Report, we noted that like our university graduates, many Transitions college graduates are well below the national median annual earnings for college graduates in the general population. The national 25th percentile of college graduates earned \$24,000 annually in 2002. However, in 2006, we noticed that only three college graduates with diplomas were earning under this salary range and in 2007 there were only four earning in that range. In 2008 there were only three earning in that salary range. However, when we consider the updated national 25th percentile earning of a college graduate, \$27,500 annually (Bayard, Class of 2005, p. 59), we are able to say that 9 participants are earning in that salary range or less. This indicates that under-employment continues to be a problem for *Transitions* college graduates.

On a provincial level, the 2006-2007 Employment Profile of college graduates reveals that the average annual salary of a college graduate employed in a full-time job one year after graduation was \$30,303. Though this survey shows that 90.3% of college graduates are employed, only 54.6% were employed full-time. Therefore, as noted in our previous reports, though the survey criteria for the provincial and national surveys regarding college graduates' salaries were different, the reported earnings were remarkably close: \$35,000 as the median of the national study and \$30,303 for the average earnings in the provincial Study.

Since the national trend toward low wages and temporary positions for recent entrants into the workforce holds for college graduates, it is important to look at whether those earning lower salaries are doing so because of having recently begun working. We asked participants how long they have been working at their current job.

Unlike our university graduates, we cannot say that those who have been working the longest are earning the highest salaries. This year, seventeen of our college graduates working fulltime have been with their current employer for more than two years and have been finished their studies for at least two years.

- 18 years One person, \$35,000
- 10 years One person, \$27,000
- 9 One person, \$40,000
- 7 years Three people, \$50,000, \$28, 500, \$28,000
- 6 years –One person, \$31,000
- 5 years One person, \$40,000
- 4 years Two people, \$38,000, \$23,000,
- 3 years Four people, \$45,000, \$17,000, \$73,000, \$80,000
- 2.5 years Two people, \$35,000, \$60,000

• 2 years – One person, \$36,000

Again, we felt it important to consider if our college graduates feel themselves to be under-employed. Eleven participants with diplomas currently working full-time consider themselves under-employed. One commented: "Overall, the amount of responsibilities that are on my plate at work, I'm not being paid adequately. Also, with the amount of experience that I have, this should also factor into a higher pay raise." Another participant who has been working with the same employer for 7 years and earns \$28,500 annually writes: "I do a lot of work for little money. I should be making a lot more after how many years I've put in."

One participant with a diploma, who works part-time, but earns \$50,000 annually, commented positively about her situation: *I'm underemployed by choice, I prefer working as a PT assistant and I don't want to work in a hospital.*

Seventeen participants do not consider themselves under-employed. Many of the comments from the participants who do not consider themselves under-employed are overwhelmingly positive and many say that they are doing what they went to school for. As one participant who has been at his job for one year and earns \$40,000 annually writes: *I'm at the right spot for me at this time. There is room for growth when I'm ready.*

Field of Study

As indicated in all previous *Transitions* Reports, field of study strongly influences overall low salaries of all *Transitions* PSE Graduate Non-Continuers, whether full-time or part-time workers. We believe this is because many participants were in the Arts and Social Sciences fields, whose average annual earnings are lower than the earnings of those in professional programs. For example, in Ontario, the average salary six months after graduation for a student with a Bachelor of Arts who graduated in 2006 was \$32,010. The average salary one year after graduation for a college Arts graduate working in a related field was approximately \$28,072 annually. In comparison, the average salary for a university architecture or engineering graduate in 2006 was \$52,057. The average salary one year after graduation for college graduated in a technology related field was \$35,870 (OUGS 2009 and *Employment Profile 2006-2007*). Thus, *Transitions* Trend #11 remains the same in 2006.

Transitions Trend #11: Field of Study likely influences low salaries of Transitions participants. (Continuing Trend)

Similar to the previous *Annual Reports*, a high number of *Transitions* participants are employed in their field of study. All 56 participants who are currently employed were asked to answer the question: Does your current employment build upon your post-secondary program?

This year, 46 (82%) of the 56 employed participants indicated that they were working in a field related to their post-secondary education, while 10 (18%) responded they were not. The number of participants working in a related field is higher this year. In 2005 67%, in 2006 63%, in 2007 67% and in 2008 75% said they were employed in a related field.

According to the latest OUGS report, two years after graduation in 2006, 85% of university graduates employed full time considered their work either "closely" or "somewhat" related to their university education. Similarly, in the 2006-2007 *Employment Profile* of college graduates, 62.3% of Graduates employed indicated that they were employed in a job related to their program of study. We can see that the *Transitions* cohort figures are similar to those in the general population.

Gender

Transitions Trend #12: Female Transitions graduates are more likely to experience high rates of under-employment than male participants. (Ending Trend)

As gender is often a determining factor when salary is considered in many Statistics Canada reports, we believe it continues to be important to investigate if gender plays a role in determining the salaries of *Transitions* participants. There continue to be indications that gender could end up being significant when trying to understand why some of our participants are under-employed.

Women in the general population make significantly less money annually than men do – usually \$4000 - \$8000 less. Only 41.1% of female post-secondary graduates with disabilities are employed year-round in Canada, compared with 51.8% of male post-secondary graduates with disabilities (Kunin 8). In addition, the proportion of women working part-time was more than twice that of men in 2007. This figure was highest amongst college graduates (Bayard, Class of 2005, p.17).

Forty-eight PSE Graduate Non-Continuers, or 68% are female. Thirty-three are working full-time.

We reported in 2007 that of the 26 university graduates working full-time, seventeen (65%) were female and nine (35%) were male. In 2008, sixteen (64%) are female and nine (36%) are male. This year, 19 (70%) university graduates working full-time are female and 8 (30%) are male.

In 2007, of the 38 graduates with college diplomas working full-time, seventeen (45%) are female and twenty-one (55%) are male. In 2008, the participant working full-time with a college certificate was female, and of those with college diplomas, 12 (44%) were male and 15

(55%) were female. Again in 2009, the participant working full-time with a college certificate is female. There are 15 (53%) males working full-time with college diplomas, and 13 (46%) females.

In 2005, we reported that 19% of female graduates were significantly under-employed (less than \$20,000 annually) while only 7% of the male graduates were significantly underemployed. Again, in 2006, 8% of female graduates were significantly under-employed, while only 4% of male graduates were significantly under-employed. In 2007, only two female graduates are significantly under-employed, and only three males. It must be noted that the gap has decreased considerably.

The following two tables detail the difference between male and female salaries of graduates employed full-time:

Female Graduate's Salaries full-time

| Female Annual Salary Range Full-time | Degree | % | Diploma | % | Certificate | % | Total | % |
|---|--------|-----|---------|------|-------------|------|-------|------|
| \$5000 - \$10,000 | 0 | 0 | 2 | 7% | 1 | 100% | 3 | 5% |
| \$10,000 - \$15,000 | 1 | 4% | 0 | 0 | 0 | 0 | 1 | 2% |
| \$15,000 - \$20,000 | 1 | 4\$ | 1 | 3.5% | 0 | 0 | 2 | 3.5% |
| \$20,000 - \$25,000 | 2 | 7% | 0 | 0 | 0 | 0 | 2 | 3.5% |
| \$25,000 - \$30,000 | 4 | 15% | 2 | 7% | 0 | 0 | 6 | 11% |
| \$30,000 - \$35,000 | 3 | 11% | 2 | 7% | 0 | 0 | 5 | 9% |
| \$35,000 - \$40,000 | 1 | 4% | 3 | 11% | 0 | 0 | 4 | 7% |
| \$40,000 - \$45,000 | 0 | 0 | 1 | 3.5% | 0 | o | 1 | 2% |
| \$45,000 - \$50,000 | 3 | 11% | 0 | 0 | 0 | 0 | 3 | 5% |
| \$50,000 - \$60,000 | 4 | 15% | 1 | 3.5% | 0 | 0 | 5 | 9% |
| Over \$60,000 | 0 | 0 | 1 | 3.5% | 0 | 0 | 1 | 2% |
| Total full-time: | 19 | 71% | 13 | 46% | 1 | 100% | 56 | 59% |

Male Graduates Salaries full-time

| Male Annual Salary Range | Degree | % | Diploma | % | Total | % |
|-----------------------------|--------|-----|---------|------|-------|-------|
| full-time | | | | | | |
| Under \$5000 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$5,000 - \$10,000 | 1 | 4% | 0 | 0 | 1 | 2% |
| \$10,000 - \$15,000 | 0 | 0 | 1 | 3.5% | 1 | 2% |
| \$15,000 - \$20,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$20,000 - \$25,000 | 0 | 0 | 1 | 3.5% | 1 | 2% |
| \$25,000 - \$30,000 | 0 | 0 | 1 | 3.5% | 1 | 2% |
| \$30,000 - \$35,000 | 0 | 0 | 4 | 14% | 4 | 7% |
| \$35,000 - \$40,000 | 0 | 0 | 1 | 3.5% | 1 | 2% |
| \$40,000 - \$45,000 | 0 | 0 | 3 | 11% | 3 | 5% |
| \$45,000 - \$50,000 | 1 | 4% | 1 | 3.5% | 2 | 3.5% |
| \$50,000 - \$60,000 | 4 | 15% | 1 | 3.5% | 5 | 9% |
| Over \$60,000 | 2 | 7% | 2 | 7% | 4 | 7% |
| Total full-time: | 8 | 30% | 15 | 46% | 56 | 41.5% |

Gender and University Graduates

The median annual salary for a female university graduate in the general population is \$43,000 for a full-time worker, whereas the median salary for a full-time employed male university graduate is \$48,000 annually (Bayard, Class of 2005, p. 59)

We can see that seven (26%) of our female graduates working full-time earn above \$40,000 annually. This indicates that our female university graduates seem to be competing well in the job market, similar to their male peers in the general population.

However, when compared to the *Transitions* male population, it seems that in 2009 six participants (22%) earn above the general population median salary for men of \$48,000 annually.

Thus, we have no reason to conclude from this round of surveying that there is any significant gender difference in terms of university graduate salaries.

Gender and College Graduates

The median annual salary of a female college graduate in the general population is \$32,200 annually, whereas a male college graduate's full-time salary is \$38,400 (Bayard, Class of 2005, p. 59)

We can see that three (10.5%) females with college diplomas earn less than \$25,000 annually. However, this remains a significant decrease from the 2005 figure of 11 (28%) earning in that salary range, and less than the 2006 figure of three and the 2007 figure of two. Seven (24%) of male college graduates earn less than the average median salary for men, and this is the same as the 2006 figure of 24% and higher than the 2007 figure of 11%.

In 2009 we can say that one male and two female college graduates working full-time appear to be significantly under-employed, earning less than \$20,000 annually.

It is also worth noting that eight men and six women earn above the college male average yearly earnings of \$38,400 annually. This does seem to indicate that though some have fallen behind the general population, many of both sexes are faring very well, and are exceeding average earnings in the general population.

There are some exceptionally high salaries to report this year: one male graduate is earning \$80,000 annually, and one female graduate is earning \$73,000.

Gender and Unemployment

PSE Graduate Non-Continuer Unemployment by Gender

| Unem- ployment | Uni | % | Dip | % | Cert | % | Total | % |
|-------------------|-----|----|-----|-----|------|----|-------|-----|
| Female | 1 | 1% | 5 | 7% | 0 | 0 | 6 | 8% |
| Male | 0 | 0 | 5 | 7% | 2 | 3% | 7 | 10% |
| Total | 1 | 1% | 10 | 14% | 2 | 3% | 7 | 18% |

^{*}The unemployment rate on this chart is taken from all PSE Graduate Non-Continuers including those who work part-time. Overall unemployment rate for PSE Graduate Non-Continuers is 18% while overall unemployment rate for all participants is 12.8%.

The overall unemployment rate for PSE Graduate Non-Continuers had increased slightly in 2008 to a low rate of 14%. In 2009 that rate has increased slightly again to 18%.

In 2006, the majority of those who are unemployed were male, 11%, versus 2% of females. In 2007, 4% of males and 3% of females were unemployed. In 2008, 8% of male and 6% of female PSE Graduate Non-Continuers were unemployed. This year, 8% of female PSE Graduate Non-Continuers and 10% of male PSE Graduate Non-Continuers were unemployed.

Across Canada, 5.5% of male post-secondary graduates with disabilities are unemployed for part or all of the year, and 30.3% are not in the labour force, while 5.7% of female post-secondary graduates with disabilities are unemployed for part or all of the year, and 40% are not in the labour force.

Again in this report, due to the small sample size, we cannot extrapolate a definitive result for whether or not the higher male unemployment rate, especially for those with college certificates, indicates that males are having a more difficult transition to the workplace. We encountered a similar problem in the previous reports.

IV. 5. Unemployment and Transitions Participants

Transitions Unemployment Rate

| Unemployment | Uni | % | Dip | % | Cert | % | Total | % |
|----------------|-----|------|-----|----|------|------|-------|-------|
| Female | 1 | 0.8% | 5 | 4% | 0 | 0 | 6 | 4.8% |
| Male | 0 | 0 | 5 | 4% | 2 | 1.6% | 7 | 5.6% |
| (Non graduate) | | | | | | | 3* | 2.4% |
| Total | 1 | 0.8% | 10 | 8% | 2 | 1.6% | 16 | 12.8% |

^{*} Two non-graduates are male and one is female

In the *First Annual Report* we noted that 15% of *Transitions* participants were unemployed. In the *Second Annual Report*, the percentage had decreased to 10%. In the *Third Annual Report* the rate of unemployment was 9.5%. In the *Fourth Annual Report*, the unemployment rate was extraordinarily low, at 5%. In the *Fifth Annual Report*, the unemployment rate is again low, at 8%.

There is a higher unemployment rate this year than in previous years. 12.8% is similar to the findings from 2004. Perhaps this increase in unemployment is also reflected in the overall Canadian unemployment rate for this recession year, which stands at 8.6% (as of November 6, 2009: http://www.statcan.gc.ca/subjects-sujets/labour-travail/lfs-epa/lfs-epa-eng.htm) Because 12.8% is still significantly higher than the inflated Canadian unemployment rate, we can no longer say that Transitions Trend #13 is and "ending" trend. Its status has been restored to "continuing".

Transitions Trend #13: Transitions participants have a slightly higher unemployment rate than the general population. (Continuing Trend)

Unemployment remains highest in those who earned college diplomas/certificates, as was the case in the previous reports. This may indicate that some of these participants are experiencing difficulties with the school-to-work transition.

The LDAC report states that 41.2% of Ontario residents age 22-29 with learning disabilities are unemployed (PACFOLD, Ontario, age 22-29, p. 3). The *Transitions* unemployment rate of 12.8% is remarkably low in comparison and is testament to the fact that when governments invest in post-secondary programs that provide students with learning disabilities with the tools to succeed in the labour market, there is a direct correlation between supports given and employment.

For the past three years, *Transitions* directed a number of new questions to participants who were unemployed and who not currently studying. First, we asked if there were any extenuating circumstances related to unemployment. Thirteen participants responded in the positive. This year six participants responded that they had serious medical problems. Three participants cited the economic downturn as the reason for being laid off. Two participants cited disability as the reason. One has decided to stay home with her kids and another says it is hard to find a job because he moves every 1.5 years because her husband is in the military.

We also asked unemployed participants to tell us which factors they believe will help ensure a successful job search. We asked, "Please rank in order of importance which factors you believe will help ensure a successful job search." The responses below are a compilation of the most popular responses:

- Participation in a mentorship program 4
- Networking 3
- Information sessions/workshops on employment 3
- Internet Job Websites 3
- Resume review 2
- Campus Career center 1

IV. 6. Life Goals and Employment

For the *Sixth Annual Survey*, we asked the 56 full-time employed PSE Graduate Non-Continuers about their career and life goals and how they are making progress in these areas. The answers in this section are all qualitative, and thus difficult to categorize, but we will try to

give as fair a sketch of how our participants are doing as possible.

The first question we asked was "In the next five years, where do you see yourself in terms of your career?" Answers varied from wanting a new career entirely to wanting to advance their current careers. Below is a table with the most popular answers (not all participants responded and some gave more than one reason):

PSE Graduate Non-Continuer Job Goals

| Career Goal | Number of participants |
|-----------------------------------|------------------------|
| Same job | 15 |
| Not sure | 10 |
| Permanent position | 5 |
| Promotion | 6 |
| No plans, not sure right now | 5 |
| Management position | 3 |
| Different company | 3 |
| Back to school | 2 |
| More stable job | 2 |
| Get more experience with this job | 2 |
| More money | 2 |
| Same company, different job | 2 |
| Move | 1 |

As this chart shows, participants are actively planning for their futures, and quite realistic in their plans. One participant writes: "Right now I'm the General Manager of Maintenance for 4 hotel properties and I would like to be the provincial manager in the future (the guy in that position now is 65 so he's retiring soon hopefully)"

One participant who is unsure where her career is progressing writes: "I would like to change schools, either move to another international school, or return to Canada to teach ESL in Ontario. If I stay at my present school for more than 3 or 4 years, I hope it will be as the principal."

As a follow-up to this question, we asked participants "Have these career goals changed in the past year?" Seventeen participants who are currently employed responded that their goals have not changed. Twenty-seven responded that their goals had not changed. Fourteen did not answer. The following is a sample of their various qualitative responses:

"Yes, I thought I wanted to go back to school to further my education but there is so much to

learn in my job now that I find it fulfilling and rewarding."

"Yes changed jobs to one that has more possibility for advancement and is more interesting and a better work environment."

"They have changed a lot. I did not know what I wanted at the beginning of 2008. I was in a terrible work situation and all I could think about was getting out of it. Now I am more focused and can figure out what I want to do."

"The past year has been rather hectic, and several different opportunities have risen and disappeared in that time. My previous goal to take the software project I had been working on and turn it into a start-up company has fallen to the wayside for now, but I'm trying to stay on track for my true goal in life. All I've ever wanted was to be a well-paid geek."

"No but were slowed down by economy."

"No, getting comfortable in my position and my salary has increased."

We also asked participants employed full-time if their current job would help them reach their career aspirations. Forty-seven participants currently employed full-time said it would help, while only five said it would not. Those who responded that their current employment would help their career goals responded mostly that the experience they are getting in their current job is very useful.

One participant wrote: "They have said there is room for me to grow in any way that I choose so long as I want to put in the time and effort for it."

Another wrote: "They will pay for further education opportunities and training."

Even participants who are not sure what their future plans are, wrote that their current careers can help them in the future. One participant wrote: "I am not sure what I want to do yet, but staving within this field, I think will help me down the road."

For those thirteen participants who do not feel their current jobs are advancing their career goals, most wrote that there is no room for advancement in their current position, or that they are working on a part-time or contract basis.

Some are very realistic about what will be required of them in order to advance their careers. One participant wrote: "It will help me decide what I prefer - training or web development. I still have my own business doing websites for small business and training for adaptive technology for high school students, private institutions and employers."

V. TRENDS RELATED TO LEARING DISABILITY

V. 1. Self-Advocacy and Resiliency

In 2005, we defined resiliency as "the competencies and abilities that some people possess which enable them to cope in the face of significant adversity and risk" and we found that the Transitions population as a whole is quite resilient. This has remained true in all subsequent years.

Life Goals

Transitions Trend #14: Transitions participants place great emphasis on educational and career goals, while social goals remain relatively low. (Continuing Trend.)

We again asked participants to tell us their life goals, as a means for us to assess how well our population balances education and career with personal satisfaction and personal goal setting. In the Second Annual Report, participants responded to goal-related questions primarily with career goals. In the most recent three surveys, we encouraged our participants to tell us the goals they have in their personal lives apart from career related goals. Thus, the question we asked was: "What kind of goals (other than career) do you wish to achieve in the near future?" Participants were able to choose any goal on this list, and their responses are as follows:

- Buy property 56
- Get married 51
- Have a steady relationship 34
- Start a family 46
- Travel 69
- Finish school 25
- Pursue further education 34
- Be debt free 66
- Other 16

Like previous reports, relationship and family goals are quite high on participant's minds. But it is again interesting how many participants wish to pursue further education, revealing that this population has a life-long interest in learning. Also worth noting is the high number of participants who cite being debt-free as a current goal. While our cohort values education, that education does not come without cost. Those who selected "other" wrote goals like "having a good paying job" and developing various hobbies. Quite a few were planning to move. Others also cited spending more time with their children.

V. 2. Impact of Learning Disability on Social Life

In order to understand how participants engage in their social life we asked participants if they consider themselves to be more social or solitary in nature. In 2009, 71 of 123 (57%) responded they were social by nature and 52 of 123 (42%) said they were solitary by nature. There is a slight increase in the number of participants who consider themselves social by nature. In previous years that number was about 54% consistently.

Transitions figures are reasonably similar to the general population figures, with 61% preferring social activities and 38% preferring solitary ones (2003 General Social Survey).

Participants were also asked how they choose to spend their free time from the following options:

Alone: 22

• With others: 25

• Both equally: 76

Twenty-two participants (18%) said they prefer to spend their time alone, twenty-five participants (20%) prefer to spend time with others, and the majority, 76 (62%), prefer the answer "both equally". *Transitions* participants seem quite balanced in their social/solitary preferences. This year's "both equally" percentage of 62% is 10% higher than the same answer from 2006-2008. Overall, this population seems to strike a good social balance.

Volunteer Work

Transitions Trend #15: A high number of Transitions participants engage in volunteer work. (Continuing Trend)

In 2005, we found that 23% of participants preferred to spend their free time doing volunteer work. In 2006, we found that 54 participants (38%) did volunteer work at an average time of six to ten hours a month, with 11 of those participants volunteering between 15 to 30 hours a month. In 2007 that number increased to 41 participants (34%) doing volunteer work on a regular basis, the majority working between one to 10 hours per month.

And in 2008, 31 participants (33%) did volunteer work, fifteen of whom worked between 0-5 hours a month, and seven between 6-10 hours a month. Nine participants volunteered somewhere between 11 to 30 hours a month in 2008.

In 2009, 45 of 123 participants (35%) do volunteer work. This is similar to the 2006-2008 figures, and remains an increase from 23% in 2005.

The 2009 volunteer statistics are as follows:

- 0-5 hours/month 17
- 6-10 hours/month 14
- 11-15 hours/month 6
- 16-20 hours/month − 2
- 21-25 hours/month 3
- 26-30 hours/month 0
- over 30 hours/month 3

Participants who do volunteer work were asked to select from a list of five answers, the major reasons they chose to volunteer. Participants were able to select more than one answer. Thirty-five participants who volunteer do so for the opportunity to help others. Twenty-five do so for the sense of satisfaction. Twenty-seven volunteer in order to gain work experience and twenty-two selected "opportunity to meet people" as their reason for volunteering. Nine participants selected "other" and described activities like helping children with sports and volunteering in classrooms in order to gain teaching experience that could be used to bolster a resume. One cited the need for "networking" as the reason for volunteering, while another writes, "I advocate for people with LDs and ADHD."

Exercise

Transitions Trend #16: A high number of Transitions participants engage in physical activity. (Continuing Trend)

In previous reports we learned that our participants showed a greater prevalence toward physical activities than in the general population, where 29% of individuals spend their free time exercising (2003 General Social Survey). In 2007, seventy-five participants (63%) said they participate in a physical activity on a regular basis. In 2008, 55 participants (59%) regularly did a physical activity. In 2009, 78 participants (63%) do a physical activity on a regular basis. This remains a positive Trend that our participants exercise so much more than the general population.

The number of *Transitions* participants who engage in physical activity on a regular basis is higher than the LDAC figure that 46.3% of Ontario residents with learning disabilities age 22-29 who consider themselves physically "healthy" (PACFOLD, Ontario, 22-29, p. 5).

In 2006, we asked participants "What kind of exercise/physical activity do you do and how often?" As this was an open-ended question, there was a wide range of responses so in 2007 we limited responses to a list of five options. Participants are able to select more than one response. We found that in 2007 and 2008 individual sports were the most popular, followed by recreational activities. The responses for 2009 are as follows:

• Group sports: 19

• Individual sports: 45

Recreational: 40

Outdoor activities: 31

• Other: 8

The most popular form of physical exercise was individual sports, with 45 of the 78 (57%) participants engaging regularly in individual sports. Forty (51%) participants enjoy recreational activities, 31 (40%) do outdoor activities and 19 (24%) like group sports.

We also asked participants "How often do you do your physical activity in a week?" Thirty-four participants (44%) exercise 3-4 times a week and thirty (38%) exercise 1-2 times per week. Ten (13%) exercise five to six times a week, and only four (5%) exercise more than six times a week.

Relationship satisfaction

Transitions Trend #17: Transitions participants appear to be resilient in social relationships. (Continuing Trend)

In order to assess the impact of learning disability on social life, we have asked participants to rate their current level of satisfaction with friends, relationships and family members. Participants were forced to select from six options, identical to options available in each previous survey. With regard to friendships, fully 65% of participants, reported that they are satisfied or very satisfied:

- Very Satisfied 23 (19%)
- Satisfied 57 (46%)
- Somewhat Satisfied 27 (22%)
- Not satisfied 9 (7%)
- Very Dissatisfied 0
- No friends 3 (2%)

The figure of 65% of participants reporting being very satisfied or satisfied with their friendships is an increase of 2% since 2008 and 2007. This remains a drop from the 2005 number of 71%, but an increase from the 2006 59% reporting high rates of satisfaction.

The rates of dissatisfaction with friendships remains the same this year, as does the number of participants who report being somewhat satisfied with their friendships. This remains lower than the 2006 figure of 26%. However, the 2007/2008/2009 figures are still higher than the 2005 figure of 18%. We are still interested to see when all participants move away from their social safety nets (school, living at home), if the level of satisfaction with friendships increases or decreases in response to work and family pressures.

When asked to rate their current level of satisfaction with relationships, including spouses/boyfriends/girlfriends, the responses in from 2005-2009 were somewhat different. In 2005, 'no relationship' was the most popular answer, with 36% of participants responding they had no relationship at that time. In 2006, 31% reported having no relationship. In 2007, an equal number of participants (29%) reported having no relationship as reported that they are very satisfied with their relationship. In 2008, 32% were very satisfied with their relationship, and 31% reported having 'no relationship' at this time. In 2009, 28% are very satisfied with their relationship and 33% reported having no relationship at this time. As in 2005, the most popular

answer was 'no relationship at this time.'

- Very Satisfied 35 (28%)
- Satisfied 32 (26%)
- Somewhat Satisfied (9%)
- Not satisfied (3%)
- Very Dissatisfied 1 (0.8%)
- No relationships at this time 40 (33%)

In 2004 and 2005, a high number of participants indicated their family was a significant support, and it was not surprising to find that 82% of participants were either satisfied or very satisfied with their family relationships. In 2006/2007/2008, 75-76% of participants were either very satisfied or satisfied with their family relationships. In 2009, 74% of participants again reported being either very satisfied or satisfied with their family relationships.

- Very Satisfied 36 (29%)
- Satisfied 55 (45%)
- Somewhat Satisfied 22 (18%)
- Not satisfied 8 (7%)
- Very Dissatisfied 1 (0.8%)
- No family relationships at this time -1 (0.8%)

Social Challenges Related to Learning Disability

In 2006, we asked a series of new questions relating to learning disability and social life. We began by asking participants if they felt they faced any challenges in their social life as a result of their learning disability. Sixty-five participants (46%) in 2006 reported learning disability related challenges to their social life. However, seventy-six (54%) responded their learning disability presents no challenge to their social life. In 2007, fifty-six participants said their social life was challenged by their learning disability, an increase since 2006. Sixty-three (53%) participants said they do not face challenges in their social life as a result of their learning disability. In 2008, forty-one (44%) said their learning disability is a challenge in their

social life, while fifty-two (56%) said it does not create challenges in their social life. In 2009, 50 participants (41%) said their learning disability is a challenge in their social life, while seventy-three participants (59%) said their learning disability does not create challenges in their social life. These figures have not changed significantly over time.

To question further those who responded that their learning disability presents challenges to their social life, we asked the question: "What would you say are the biggest challenges you currently face in social situations due to your learning disability?" As participants could respond freely, the list below is a compilation of the most common answers:

Social Challenges

| 2006 | 2007 | 2008 | 2009 |
|---|-------------------------------------|-------------------------------------|---------------------------------|
| Shyness: 15 | Shyness: 20 | Quick self expression in groups: 15 | Conversation Problems: 11 |
| | | | (Interrupting, not remembering) |
| Self-consciousness: 12 | Speech/self-expression trouble: 12 | Self-conscious: 7 | Self-conscious: 6 |
| Memory problems (words, faces, etc.): 9 | Trouble in large groups: 7 | Shyness: 4 | Shyness: 5 |
| Problems with self- expression: 6 | Making Friends: 4 | Low self-esteem: 4 | Reading/writing in public: 5 |
| Social anxiety: 5 | Anxiety: 3 | Not witty: 2 | Looking stupid: 3 |
| Distracted: 4 | Memory: 2 | Anxiety: 2 | Anxiety: 2 |
| Others speak too fast: 3 | Reading: 1 | Reading/writing in public: 3 | No Social skills: 2 |
| Over analyzing everything: 2 | Time management: 1 | Meeting new people: 2 | Eye contact: 2 |
| Loner: 2 | Difficulty reading body language: 1 | Difficulty reading body language: 1 | Not assertive: 1 |
| Reading in public (menus, signs): 2 | | No time for social life: | Driving: 1 |

Though it is difficult to gage changes in freely expressed responses over time, what was very noticeable in 2008 was that many participants are experiencing problems with self-expression particularly in group settings, whereas in the past self-expression problems occurred in many different settings. In 2009 what is noteworthy is the high number of participants who used the word "conversation" in particular. The "conversation" heading includes those who have

trouble listening and remembering, and those who are so impulsive they cannot help but interrupt people. It is also notable in 2009 that "shyness" was not as popular an answer as it was in 2006/2007. Overall, participant responses may show some of the pressures all young people experience in their social lives.

One participant writes: "In addition to my LD, I also have ADHD. The impulsivity that comes with this can pose problems in social situations. I tend to say the wrong thing or unintentionally insult people by not thinking before I speak." Echoing the same theme, another writes: "The biggest challenges I face are that if we are talking, and an idea comes up in my brain, I usually will interrupt not because I am trying to be rude, but because I know I will forget what my thought was by the end of the conversation, and this may be interpreted as being rude or that I am a rude person. However, with that being said, I now try to write down my thought, and come back to it if the opportunity arises."

Some participants are also finding that their learning disability is in some way hindering the development of meaningful friendships or relationships.

One participant comments: "I need to be more assertive in my conversation style. I feel I am too non-verbal. I am trying to change and am seeking counselling support to help address this so that my feelings don't escalate and blow up. So I am having trouble with communication, which, I think, prevents me from having deeper, richer connections with people, especially those I love. So I want to build stronger, more lasting, more authentic relationships with people so that I feel more fulfilled."

One participant comments about having friends for the first time who do not know about her learning disability: "For the first time, I have some friends who don't know about my LD. I think this has happened because I'm not in school, so it's not having such an obvious impact (i.e. I don't have to pick up notes, or write an exam in a different place). These friends are confused by the spelling errors I make online, and sometimes make fun of them. I know they are not trying to be hurtful. I'm not sure how to broach it, so I just let them tease and switch the topic to something else."

Other participants' responses are to the point, and poignant: "Sometimes my ADD gets the best of me...sometimes I get the best of it."

As a counterbalance to the above question, we also again asked all participants "Do you feel that your learning disability has given you an advantage in social situations?" Though ninety-five participants (77%), responded in the negative, twenty-eight (23%) participants did feel their learning disability has given them an advantage in social situations. The 2009 figures are quite similar to those in 2006/2007, though there was a slight decrease in those citing their learning disability as advantageous in 2008, from 21% in 2007 to 18% in 2008. Participants commented extensively about the advantages, and the lists below are a compilation of the most common responses in the past four years.

Social Advantages

| 2006 | 2007 | 2008 | 2009 |
|------------------------------------|--------------------------------------|-------------------------------|---------------------------|
| Less judgmental/more empathetic: 9 | Less judgmental/more empathetic: 6 | New perspective: 4 | Think outside the box: 3 |
| Abstract/creative thinking: 5 | Not shy: 4 | Empathetic/intuitive: 3 | Great speaker: 3 |
| Forced to be confident: 4 | Quick thinking: 3 | Good communicator: 3 | Intuitive: 2 |
| Better memory/more observant: 3 | Know own strengths/ weaknesses: 2 | Relate with people: 2 | Sensitive: 2 |
| People skills: 3 | Express feelings well: 2 | Talkative/outgoing: 2 | Good listening skills: 2 |
| Assertive: 2 | Spontaneous: 2 | Sense of humour: 1 | Social skills: 2 |
| Increased intelligence: 2 | Sense of humour: 1 | Know strengths /weaknesses: 1 | Funny/high energy: 2 |
| Sense of humour: 2 | Socially intelligent: 1 | Visually perceptive: 1 | Multi-tasking: 1 |
| | Quick speaking: 1 | | Interest in everything: 1 |
| | Deal well with stress: 1 | | Good memory: 1 |
| | Humble: 1 | | Good critical sense: 1 |

These participants have recognized their areas of difficulty and many discuss the ways they have adapted to help themselves in social situations. One participant wrote: "In some social situations I am able to think outside the box, and come up with some unusual ideas that some people think are very interesting. LD people have a neat ability to be creative, and think differently than others."

Similar to the 2008 findings, speaking skills were a common theme again this year. "I make up for my weaknesses in terms of reading and writing as orally I am very sound. I can express my feelings easily and can talk clearly and precisely. Also, when I talk I am very confident in my abilities." Another writes: "Because of my LD I had to develop extra strong verbal skills, also my parents put me in public speaking in kindergarten to encourage my verbal skills so I'm quite confident in groups and social settings."

A few participants wrote about how their LD has helped them become more sensitive and empathetic. "I think my LD helps me to have empathy for people who struggle." Another writes: "I think I have more tolerance for people because of my learning disability."

Finally, one participant wrote about the effect of disclosure. "I find after disclosing my LD people often speak to me about either a family member or a friend who also has an LD."

V. 3. LD-Related Challenges at Work

In 2006/2007/2008, we asked all employed participants (not only those who are not currently studying) if they faced any challenges related to their learning disability at work. The responses to this general question, and their list of specific challenges provided insight into their working lives. This year, we chose to ask this question again.

In 2006, when asked if they faced any challenges related to their learning disability at work, 42 employed participants responded that they do face challenges, while 70 responded that they did not. In 2007, 42 people faced challenges, while 56 reported they did not. In 2007, 21 employed participants faced challenges at work, and 31 responded in the negative.

This year, 50 participants said they face challenges related to their learning disability at work, and 49 said that they did not. Of those who felt they had learning disability related challenges at work, the biggest challenges are listed in the chart below

Common Challenges at work

| 2006 | 2007 | 2008 | 2009 |
|-------------------------------------|---------------------|---------------------|-----------------------------------|
| Memory/concentration: 11 | Writing: 13 | Spelling/grammar: 4 | Writing: 11 |
| Spelling errors: 7 | Spelling errors: 11 | Reading: 3 | Spelling: 9 |
| Phonics: 5 | Reading: 6 | Writing: 3 | Memory: 8 |
| Editing: 5 | Time management: 5 | Need more time: 3 | Time management: 4 |
| Co-workers who do not understand: 4 | Math/numbers: 4 | Self-expression: 2 | Attention span in meetings: 4 |
| Time management: 3 | Memory: 3 | Time management: 2 | Learning new things fast: 2 |
| Hiding learning disability: 2 | Focus: 1 | Organization: 2 | Reading: 2 |
| Reading: 2 | Confidence: 1 | Confidence: 1 | Need more time: 2 |
| Paperwork: 1 | Self expression: 1 | Fatigue: 1 | Listening: 2 |
| Not bilingual: 1 | | Math: 1 | Overwhelmed: 1 |
| | | Details: 1 | Need visual aids: 1 |
| | | Memory: 1 | Focus: 1 |
| | | | Don't ask for challenging work: 1 |
| | | | Over stimulation: 1 |

Many of our participants are teachers, and as teachers they seem to have very specific challenges. Many participants have found very unique ways to adapt to the challenges presented in classroom teaching.

Here are a few examples:

"I have trouble spelling and as an English teacher that's tough, but I have been coping fine. It's easy to mask as long as I do some work ahead of time (e.g. create an overhead instead of writing things on the board)."

"I find it really difficult to sit and listen to my students for long periods of time. I get lost in conversation. During presentations I lose focus. I have used a video camera to record student presentations."

"I know it takes me more time to complete things such as reading materials, so when other teachers leave work at 4pm, I am still at work until 6 or even 8pm at night to get my work done, which is okay with me but it does take time."

"I constantly feel overwhelmed because there is no consistency in my job and my memory often feels overloaded trying to juggle kids' names, school rules and schedules, the teacher's lesson plans etc. I never feel like I'm on the ball when I supply teach."

Disclosure at work

All 99 currently employed participants were asked about disclosure of their learning disability at work. Forty-eight participants (48%) who are currently employed responded that they have disclosed that they have a learning disability at work. This is the same figure as in 2006 and 2007, and slightly less than the 50% who disclosed in 2008. However, again all of these figures are significantly higher than the 38% in 2005 and the 30% in 2004.

Of those who disclosed their learning disability, only two received a negative response. This is the same number reported in 2008, and remains an increase of one participant since 2007.

That 96% of those who disclosed found the reaction positive is an incredible percentage, though a little less than the 99% reported in 2006/2007. This indicates a positive transition from school to work for these participants.

Fifty-one participants (51%) have not disclosed. We then asked why they have chosen not to disclose and only 31 participants responded. Of those participants who responded, 26 of 31 (83%) said disclosure was not necessary. This figure is less than the 86% reported in 2008, but higher than the 2006 response of 78%.

Other responses included one participant being on probation at work and when that time period is completed plans to disclose, another is self employed. One told colleagues but not the boss.

Two responses were not encouraging:

"People still think people with LDs are stupid."

"I did once before to an employer and I felt like he looked down upon me. Maybe he was just the wrong person to say anything to. To my coworkers I have not disclosed. I say I am the worst speller in the world (they notice this) but I don't go into it. They don't need to know."

This year, we asked participants who have not disclosed if they plan to. Four of the 51 participants who did not disclose plan to in the near future. This is less than the 8 who said they would do so in 2008. We again hope that those, people who do not believe their disclosure will be accepted will be encouraged by the overall positive reaction other *Transitions* participants have had to their disclosure. This figure has been posted on the *Transitions* Portal (www.transitionsportal.ca), and we hope to highlight it again this year.

Transitions Trend #18: Transitions participants disclose their learning disability at work only when necessary for the job. (Continuing Trend)

In previous years we have noted that more females than males have disclosed they have a learning disability at work. In addition, we have noted in previous reports that disclosure may be more important for individuals who work full-time rather than at a part-time job.

In 2008, it was a trend that more women working full-time disclose their learning disability than men working full-time. In 2009, 11 men working full-time have disclosed and 23 women have done so.

Transitions Trend #19: Significantly more women working full-time disclose their learning disability at work than men working full-time. (Continuing Trend)

Accommodations at Work

Of the 99 participants who are currently employed, only 20 (20%) use accommodations at work. The 2008 figure was 25%, which is the highest accommodation use recorded. The 2009 figure of 20% is similar to the figures from 2005/2006/2007 where only 18%/21%/22% used accommodations.

The most common accommodations used at work are as follows:

- Computer/laptop
- Spell check
- Assistive technology
- More time
- Flexible deadlines
- Proofreader

For those who are using accommodations, it seems they have made the transition from school to work successfully using accommodations, though they are a small percentage of employed participants. All participants currently using accommodations said their employers had no problems providing them or that they did not have to ask but provided their own. This shows that these participants know very well what it takes to succeed and have the initiative to set up those conditions for themselves. One participant wrote: "It was treated well. My supervisor believes strongly that she has a responsibility to accommodate me."

Still, the majority of participants do not use accommodations in the workplace. Seventy-nine currently employed participants are not using accommodations (one participant did not respond). Most of these participants have not requested accommodations. One participant requested accommodations and had that request turned down. In response to the question "why are you not using accommodations" the one participant whose request was turned down wrote, "They could not do anything." For most participants, 73, they wrote that accommodations were not needed. One participant uses his own, one wrote "pride" and one wrote that none are available.

Transitions Trend #20: Few participants who are currently employed use accommodations and/or assistive technology at work. (Continuing Trend)

Assistive Technology at Work

In 2008, only 13 participants of the 52 (25%) who were currently employed used assistive technology at work. In 2009, 24 of the 99 (24%) participants currently employed use assistive technology at work. The 2008-2009 figures show an increase since previous years. In 2007, 22% used assistive technology; in 2006 and 2005 it was 18% and 21% of employed participants who used accommodations.

• Speech to text: 0

• Concept mapping: 4

• Text to audio: 7

Digital organizer: 8

• Digital dictionary: 9

• Others (Word Cue, Text-help, Franklin – 2, email communication, computer – 2)

Of those who are using assistive technology in the workplace, only four requested assistive technology from their employer (the same figure as in 2008/2007), while 20 installed it themselves or brought their own from home (and increase from 9 participants doing so in 2008). This shows the independence of *Transitions* participants, likely attributable to the excellent training on assistive technology in the pilot programs.

Similar with accommodation use at work, of the 75 currently employed participants who do not use assistive technology at work, the majority, 53 (71%), do not use it because it is not necessary for their current employment. Four participants wrote that they only use a spellchecker; one wrote they don't want to use accommodations, and 17 did not answer this question.

Relationship with Co-workers

Transitions Trend #21: Transitions participants have good relationships with their co-workers. (Continuing Trend)

In 2005, 94% of participants described their working relationship with their colleagues as "comfortable." In 2006, 96% have a comfortable working relationship with their co-workers. In 2007, 93% described their relationship with their co-workers as such. In 2008, 88% described their relationship with their colleagues as comfortable. This year, 93 of the 99 (94%) currently employed participants say their working relationships are comfortable.

As in previous reports, we asked participants if they interact with their co-workers outside of the workplace. Fifty-two of the 99 employed participants (53%) responded that they do spend time with their coworkers outside of work. This is a 10% decrease from the 2008 figure of 63%.

We also asked how much time participants spend with their coworkers outside of work, and the most common response was "less than once a week" (34), closely followed by "1 to 3 times

a week" (16), and two responding "more than three times a week." We believe these figures again corroborate *Transitions* Trend #21.

General Job Satisfaction

Participants were asked in 2006 "Are you satisfied with your job?" An overwhelming 73% of the participants responded that they were satisfied. In 2007, 74% of employed participants responded that they were satisfied. In 2008, 69% of employed participants were satisfied. In 2009, 75 of the 99 employed participants reported satisfaction with their work, at a rate of 75%, the highest rate so far.

Participants were encouraged to comment about their responses. Some affirmative responses are as follows:

"Yes. I get to have many personal relationships with the clients I have and when I get new clients I get to form relationships all over again. Also everyday is different. It is an exciting and challenging career."

"I love my job and I am very lucky to be doing something I love and to give back and make a difference in children's lives. I am very blessed."

"I have found a job in an area I didn't think I could do. Numbers and I never got along very well. It is really satisfying and rewarding to know I can do it."

Participants who were not satisfied with their current jobs generally seem dissatisfied due to under-employment. Some participants responded as follows:

"The job itself isn't really bad but being a contract job it is not dependable enough to support my family and I really want to have my own business someday."

"It's a McJob."

"I would like to make more money and would like to be doing more."

Despite comments like these, we are prepared to confirm *Transitions* Trend #22 again this year.

Transitions Trend #22: An overwhelming percentage of Transitions participants experience job satisfaction. (Continuing Trend)

In 2007, we chose to ask a new question "Do you feel you are able to balance work and life? The response to this question was mixed. 56% of participants responded in the affirmative while 44% answered in the negative.

In 2008, we rephrased the question to "Do you feel that you are achieving a healthy work/life balance?" and the response was similar to the 2007 figures. Thirty-one of the 52 (60%) currently employed participants responded in the affirmative. Forty percent of participants do not feel they are achieving this balance.

In 2009, 69 of the 99 employed participants (70%) responded they feel they are achieving a healthy work/life balance.

Participants were asked to comment about this balance. Those who responded positively, many wrote that they truly enjoy their jobs, though in 2009 a high number of participants added that there is always room for improvement. Some positive comments are as follows:

"I think I am almost achieving a healthy work/life balance. There is room for improvement, as I do get really irritable when I am at work a lot. I tend to bring that frustration home with me."

"Absolutely. I love what I do and it's not affecting my home life at all."

"I work too much, but sometimes I do have a bit of a social life outside of studies and work."

Others who do not feel they have achieved a good work/life balance often wrote that they were not capable of doing everything that was demanded of them in such a limited amount of time. Here are some responses:

"Sometimes I come home and my brain is so tired from working all day that I just sleep the whole night away. That in itself is not healthy and I push myself to do things with my family and friends even thought I am so tired I just feel like sleeping."

"I work long hours, most nights, occasionally on weekends. I basically no longer have a life outside of work. And it doesn't appear that things will change in the future."

"I feel that the fact that I find myself working about 60 hours per week, 30 of which are outside of work, the line between work and life is at times blurry."

V. 4. Additional Concerns Related to Learning Disability

At the end of the survey, we asked participants the following question:

"Earlier in the survey, you were asked what specific challenges you currently face in terms of school, employment and social situations. Are there any other ways you feel that your LD affects you at this time that you did not mention above?"

In 2009, 37 participants answered that they felt there were other ways their learning disability affected them (20 in 2008, 37 in 2007, 35 in 2006). The fact that this number has decreased so

much is encouraging.

In 2008 we chose not to list common responses because participants' answers were so varied, and so interesting. In 2009 we have chosen to do the same and we have included some mixed responses as follows:

"I forget so much. I have lists that go on and on just so I can keep up with things to be done. I am working more and more on managing my life with less stress and I think it is helping. I look at my LD differently than years ago."

"Just that sometimes I feel there is so much more I could do, but this really holds me back from what I could accomplish and that gets frustrating because I feel like I am being held down so to speak from who I can become."

"It impacts my relationships. The impulsivity and cognitive rigidity cause problems in my marriage. I crave structure and routine (because without it my world is utter chaos), but my husband struggles to wrap his head around my "black and white" thinking."

We also asked participants: "Do you feel that you have learned how to manage your LD?"

Ninety-six of 123 participants (78%) responded they have learned to manage their learning disability. This percentage is less than the 2008 figure of 92% and the 2007/2006 figure of 87%.

These participants were asked to describe in detail the ways they have learned to handle their learning disability, and the following list is a compilation of the most common responses. Some responses were quite detailed, and have been marked in different categories.

• Working harder in problem areas: 45

• Coping strategies: 32

Adaptive technology/computer: 23

• Know own strengths/weaknesses: 19

• Self acceptance/self-advocacy: 9

• Give myself more time for tasks: 9

• Ask for help: 5

• Recognizing my triggers: 4

Learning strategies: 2

• Medication: 1

One participant wrote: "I don't have a lot of trouble, but when I do stumble across something that is giving me problems, actually talking through the problem allows me to straighten out the situation. Another participant simply wrote: "I understand my 'trigger' signals and know when to 're-focus'" Responses like these make us very happy to corroborate Transitions Trend #23 from the 2006/2007/2008 reports.

Transitions Trend #23: Overall, Transitions participants feel they have learned how to manage their learning disability. (Continuing Trend)

The Provincial Overview of Survey Results of College Students reveals that only 54% of college graduates employed in a full-time job are working in a field related to their education. In 2009, 54 of all 70 (77%) of employed *Transitions* participants reported working in a job related to their education. This is an increase of 2% since the 2008 report.

It is certainly encouraging that 77% of employed *Transitions* participants report working in a job related to their education.

Transitions Trend #24: A higher percentage of Transitions participants report being employed in a field related to their education than the general population (New Trend)

VI. CONCLUSION

Life is never without its bumps and warts. As noted at the beginning of the report, our Transitions cohort is doing well compared to people in the general population of a similar age and education. Participants are generally thriving as well as in the general population, though this observation does not mean there are not some concerns. Transitions participants continue to worry about debt in a manner which impacts on their life decisions. The unemployment rate is up from last year, and at 12 %, it is higher than the Canadian rate of 8%. Still, as we consider the overall impression evident from 24 Transitions Trends and further consider where LD adults have traditionally resided, the Transitions portrait is overwhelmingly positive.

Certainly dealing with debt and unemployment requires resiliency. Fortunately, our cohort has, of necessity, dealt with adversity since they were young, and may be better equipped than the general population to harness resiliency when required. Perhaps the difficulty of dealing with a learning disability early in life has translated into the ability to deal with adversity as our group navigates through adulthood. Unlike the portrait of over-protected, experience shy children from Estroff Marano's A Nation of Wimps: The High Cost of Invasive Parenting, our cohort was exposed to life experiences early on that taught, at the very least, the necessity of self-reliance and perseverance.

The notion of resiliency might best be conceptualized as having a ripple effect, and it will be interesting to see if our Transitions group will still be reaping its benefits at the end of the ten year study.

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VIII. 6TH YEAR SURVEY

SECTION I: PERSONAL INFORMATION

| 1) Name: | | _ | | |
|--|---------------------------|----------------------------|------------------|-----------|
| 2) Gender: Male □ | Female □ | | | |
| 3) Age: | | | | |
| 4) Pilot Institution: | | _ | | |
| SECTION II: EDUCATI | ON | | | |
| 5) Are you currently study | ing? | □ Yes □ No* | | |
| *If you answered No, plea | se skip to Questio | on #6 | | |
| IF YOU ARE CURRENT | TLY STUDYING | } | | |
| 5a) Are you attending: Program | □ University | □ College | □ Certifica | ite |
| 5b) Field of study: | | | | |
| 5c) Are you registered: | □ Full-time | □ Part-time | □ Special S | Student |
| 5d) Are you registered as a | a student with a dis | sability? | □ Yes | □ No |
| 5e) Do you use accommod the Special Needs Office a | * | | scribe, etc.) pr | - |
| 5f) Do you use assistive te (i.e. Dragon Naturally Spe | | | ☐ Yes | □ No |
| 5g) If yes, what kinds of Inspirations, Kurzweil, etc | | ogy do you use (i.e. Drag | gon Naturally | Speaking, |
| 5h) Are you currently wo | rking part-time w | /hile studying? (i.e. Less | than 35 hours | per week |

| together with classroom study. This does taking classes during the summer semester.) $\hfill \norm{$\square$ Yes} \hfill \norm{\square No}$ | not include summer emp | oloyment unle | ess one is |
|--|-------------------------------------|-----------------|------------|
| 5i) Are you currently working full-time w together with classroom study. This does taking classes during the summer semester.) □ Yes □ No | | - | |
| 5j) Are you currently working at a non-payin | g internship/placement? | □ Yes | □ No |
| 5k) Do you currently have a paid co-op place | ement? | □ Yes | □ No |
| 51) Do you feel prepared to seek employment (Please specific about your reasons why or w | <u> </u> | □ Yes | □ No |
| 5m) Do you face any challenges at school du | e to your LD? | □ Yes | □ No |
| 6) Have you graduated from a college or univ | versity program? | □ Yes | □No |
| *If you answered No, please skip to the <i>Spec</i> the instructions | ialized Education Questio | ns below and | follow |
| IF YOU HAVE GRADUATED | | | |
| 7) If yes, please tell us if you graduated from | more than one program: | | |
| □ 1 program □ 2 programs □ 3 programs | | | |
| 7a) If yes, please select the type of each prog selected more than one program, remember t graduated from for each. If you graduated w make this very clear) | o write the year of graduati | ion and the sch | nool you |
| b) □ College Diploma Year/In | stitution stitution stitution | | |

IF YOU ARE CURRENTLY STUDYING AND DID NOT GRADUATE 8a) Are you still in the academic program you began as a pilot student? □ Yes \square No 8b) If yes, please explain what progress you have made towards finishing your program. 8c) If no, please elaborate on your decision to leave the program. (i.e. Did you switch programs?) 9a) Which factors have contributed to you still being in school? (Please choose only one reason that best describes your situation.) a) Decision to switch programs has prolonged studies b) Have been in my program for the typical time period c) \(\propto \) More time required to graduate due to LD (i.e. reduced course load) d) Financial concerns (i.e. must work a lot, difficulty paying tuition) e) □ Love of education f) Concern over leaving school and having to seek employment 9b) Please elaborate: 10) When do you expect to graduate? Month: _____ Year: ____ 11a) Do you intend to pursue further education after graduation? \Box Yes \Box No 11b) Please elaborate on your reasons why or why not. IF YOU ARE CURRENTLY STUDYING AND HAVE GRADUATED 12) When did you return to school? a) □ immediately after graduation b) □ one year after graduation c) more than one year after graduation

- 13a) After successfully graduating from one post-secondary program, why did you choose to return to post-secondary studies? (Please choose the <u>one</u> answer that best describes your situation and then expand on your choice.)
 - a) \square Require further qualifications to attain the job or career I want (i.e. B.Ed., trade

| 18a) Do you plan on returning to school in the future? Yes No |
|--|
| 18b) If yes, when do you plan on returning? Month: Year: |
| 18b) If yes, when do you plan on returning? Month: Year: |
| 18a) Do you plan on returning to school in the future? ☐ Yes ☐ No |
| |
| 17) Do you want to graduate from the program that you began as a pilot student Pes No |
| 16b) Please elaborate: |
| f) \Box could not pass all the courses/requirements for graduation |
| e) □ found full-time employment |
| c) □ cannot decide what career to pursued) □ found part-time employment |
| b) ightharpoonup financial concerns (i.e. must work a lot, difficulty paying tuition) |
| a) □ did not enjoy program of study |
| 16a) Why did you leave your program without graduating? (Please choose any reasons that apply and then expand on your choice.) |
| IF YOU ARE NOT CURRENTLY STUDYING AND DID NOT GRADUATE |
| 15b) Please elaborate on your reasons why or why not. |
| |
| 15a) Do you intend to pursue still further education after graduation? □ Yes □ No. |
| 14) When do you expect to graduate? Month: Year: |
| 13b) Please elaborate: |
| e) Concern over leaving school and having to seek employment |
| d) Love of education |
| |

IF YOU ARE NOT CURRENTLY STUDYING AND HAVE GRADUATED

| 19a) Did you feel prepared to seek employment after graduation? (Pleareasons why or why not). \Box Yes \Box No | se be about yo | our |
|---|------------------|-------------|
| 19b) Please elaborate: | | |
| 20a) Do you plan on returning to school in the future? □ Yes | □ No | |
| 20b) If yes, why do you plan to return to school? (Please choose the one describes your reason for returning to school.) | e answer that b | pest |
| a) □ To obtain further qualifications to attain the job I want (i.e. b) □ To become more specialized in my field (i.e. graduate school) □ To obtain higher pay in my field d) □ Love of education e) □ Difficulties seeking employment | | ertificate) |
| 20c) Please elaborate: | | |
| 20d) If yes, when do you plan on returning to school? (Include month a | nd year) | |
| 20e) If yes, what program do you plan to pursue? | | |
| SECTION III: FINANCIAL CONCERNS | | |
| 21) Have you ever had any student loans? (If Yes, proceed to Question # 22a. If No, proceed to Question #23) | □ Yes | □ No |
| 22a) Are you presently in debt from student loans? | □ Yes | □ No |
| 22b) If yes, what is the amount of debt you have incurred from student exact as possible.) \$ | loans? (Please | be as |
| 22c) If yes, does your debt load prevent you from enjoying the lifestyle elaborate below.) | that you want | ? (Please |
| 22d) If yes, please elaborate on what effect your student debt have on y | our life at this | time: |

SECTION IV: EMPLOYMENT

| 23) Are you currently emplo | oyed? □ Ye | s 🗆 No | |
|---|--|----------------------------------|--|
| IF YOU ARE CURRENT | LY EMPLOYED | | |
| 24) What is your current emdescribes your current situativeek.) | | | |
| a) □ Full-time permanent b) □ Full-time temporary g) □ Paid Apprenticeship j) □ Summer Employment (working only during the sur | d) □ Part-tim h) □ Paid Co choose this if you are o | e Temporary -op currently studyi | f) □ Casual i) □ Seasonal ng and know that you will be |
| 25) What type of work do y | ou do? (Please choose | the category that | at best fits your job) |
| a) Security/Corrections b) Restaurant/Hospitality g) Health and fitness j) Computers/Internet m) Childcare/recreation p) Other: | d) Office/Administra h) Construction/Fact k) Media/Communion) Accounting/Finar | ative tory/Trade cations | f) Education i) Agriculture |
| 26) How long have you bee | n with your current em | ployer (in years | s)? |
| 27) On average, how many | hours do you work in a | ı week? | |
| 28) What is your <i>expected</i> a | nnual gross salary for | 2007? (only nu | mbers) \$ |
| 29a) For the purposes of thi than your education and wo | | | as "employed at a lower leve |
| As such, would you conside | r yourself to be under | employed at this | s time? \square Yes \square N |
| 29b) If Yes, please discuss vresponsibility and salary bas | <u> </u> | | |

| 29c) If no, please explain why you do not consider yourself to be underemployed at this time: |
|---|
| 30a) Does your current employment build upon your post-secondary program? □ Yes □ No |
| 30b) If yes, please elaborate: |
| 30c) If no, is this a choice on your part or are you unable to find work in your field? (Please discuss.) |
| 31a) In the next 5 years, where do you see yourself in terms of your career? Please elaborate: |
| 31b) Have these career goals changed in the past year? Have you made any progress? Please elaborate: |
| 32a) Will your current employment help you to reach your career aspirations? |
| ☐ Yes ☐ Note 32b) If yes, please elaborate: |
| 32c) If no, please elaborate: |
| 33a) Have you disclosed that you have a LD at work? □ Yes □ No. |
| 33b) If yes, when did you disclose? |
| 33c) If yes, was the reaction negative or positive? □ Negative □ Positiv |
| Please elaborate: |
| 33d) If no, why have you chosen not to disclose? |
| 33e) If no, do you plan to inform your employer about your LD in the future? |
| 34a) Do you use any accommodations (i.e. extended time to complete tasks) at work due to your LD? |
| 34b) If yes, which ones specifically? |
| 34c) If yes, how was your request for accommodations treated? |

| 34d) If no, have you requested accommodations at work? | □ Yes | □ No |
|--|----------------|--------------------------------------|
| 34e) If no, why not? | | |
| 35a) Do you use any assistive technology to help you with your v | | ount of your LD? Yes \square No |
| 35b) If yes, what type of assistive technology do you use? (choose a) □ Dragon Naturally Speaking b) □ Inspirations c) □ Kurzweil d) □ Spell-checker e) □ Palm Pilot f) □ Others: | se any that ap | oply) |
| 35c) If yes, did you: a) □ Request assistive technology to be provided by your b) □ Install it yourself (i.e. bring in your own) | workplace | |
| 35d) If no, (you do not use any assistive technology to help you | with your wo | ork), why not? |
| 36a) Do you <i>currently</i> face any challenges related to your LD at | work? 🗆 | Yes □ No |
| 36b) If yes, what would you say are the biggest challenges you c | urrently face | at work? |
| 37) Do you have a comfortable working relationship with your compared to the second se | olleagues? | Yes |
| 38a) Do you socialize with your colleagues outside of the workp | lace? | Yes □ No |
| 38b) If yes, how often do you socialize with your colleagues outs | side of the w | orkplace? |
| a) □ Less than once a week b) □ 1 to 3 times a week c) □ More than 3 times a week | | |
| 39a) Are you satisfied with your job? (Please elaborate on why or why not in the <i>Comments</i> section be | | Yes □ No |
| Please elaborate: | | |

| Dlanga (| olahorata: |
|----------|--|
| ricase | elaborate: |
| IF YO | U ARE CURRENTLY UNEMPLOYED |
| 40) Wh | at has been your employment history since graduating or leaving school? |
| | re there extenuating circumstances related to your unemployment? (i.e. health, injury, ity leave)? □ Yes □ No |
| 41b) If | yes, what are they? |
| | ease rank in order of importance which factors you believe will help ensure a success rch: (1 being the most important and 7 as least important) |
| | Information Sessions/Workshops on employment skills/job search tools |
| | Resume Reviews/Tutorials |
| | Networking (i.e. job fairs) |
| | Mock Interviews |
| | Internet Job Sites |
| | Campus Career Centre |
| | Participation in a mentorship program |
| 42b) Ha | ave you used any of the above strategies to help you find employment? |
| 42c) If | yes, which ones? |
| 43a) Do | o you feel hindered in the workforce because of your LD? |
| 43b) If | yes, in what ways does your LD hinder you in the workforce? (chose any that apply) |
| | □ Difficult to gain access to the job that you want |
| | □ Prevents you from getting a promotion |
| | □ Slows down your speed of completing tasks when compared with other co-workers |
| | $\ \square$ Makes it difficult to interact with your co-workers (i.e. you're self-conscious about your LD) |
| | □ Other |

| 43c) If no, why not? | | | |
|--|-------------------------|---|------------|
| SECTION V: SOCIAL LIFE | | | |
| 44a) Do you do volunteer work? | □ Yes | □ No | |
| 44b) If yes, how many hours per month do yo | ou volunteer? | | |
| a) □ 0-5 hours/month | | | |
| b) □ 6-10 hours/month | | | |
| c) 11-15 hours/month | | | |
| d) □ 16-20 hours/month | | | |
| e) □ 21-25 hours/month | | | |
| f) \(\sigma 26-30\) hours/month | | | |
| g) \square over 30 hours/month | | | |
| 44c) If yes, what are your reasons for volunte | eering? | | |
| a) □ Opportunity to helping others | | | |
| b) ☐ Sense of satisfaction | | | |
| c) Gain experience/skills for use in | the paid workforce | | |
| d) □ Opportunity to meet people | | | |
| e) Other | | | |
| 45a) Do you participate in a physical activity | on a regular basis? | □ Yes | □ No |
| 45b) If yes, what kind of exercise/physical ac | ctivity do you do? (cl | hoose any that apply | y) |
| a) □ Group sports/intramural teams (i | .e. soccer, baseball, h | ockey) | |
| b) □ Individual sports (i.e. walking, re | | - · · · · · · · · · · · · · · · · · · · | |
| c) Recreational sports (i.e. work out | t at the gym, participa | ate in an exercise cla | ass, etc.) |
| d) □ Outdoor activities (i.e. camping, | hiking, kayaking, etc | 2.) | |
| e) Other: | | | |
| 45c) How often do you take part in a physica | l activity? | | |
| a) □ 1-2 times a week | | | |
| b) □ 3-4 times a week | | | |
| c) □ 5-6 time a week | | | |
| d) □ More than 6 times a week | | | |
| 46) Would you describe yourself as more of a | a social person or sol | itary person? | |

| Please explain if possible: | | | |
|---|--|--|--|
| 47) If you have free time, do you generally choose a) □ With others b) □ Alone c) □ Both equally d) □ Don't have free time | to spend it: | | |
| LIVING ARRANGEMENTS | | | |
| 48a) Do you currently live with your parents? | □ Yes □ No | | |
| 48b) If yes, why: | | | |
| a) □ Financial reasons (i.e. can't afford to let) □ Cultural reasons c) □ Still dependant upon parents (emotioned) □ Parents are dependent on you (i.e. you e) □ Preferred living arrangement at this time | ally, etc.) I're taking care of your parents) me | | |
| 48c) Please elaborate: | | | |
| 48d) If no, please chose the answer that best describes your current living arrangement: | | | |
| a) □ In residence b) □ With spouse/partner and children c) □ With friends d) □ With family members (other than pare | g) Alone | | |
| 48e) Please elaborate: | | | |
| RELATIONSHIPS | | | |
| 49) Regarding your friendships, how would you ra | te your current level of satisfaction? | | |
| a) □ Very Satisfiedb) □ Satisfied | | | |
| c) □ Somewhat Satisfied | | | |

| d) □ Not satisfied | |
|--|--|
| e) Very Dissatisfied | |
| f) □ No friends | |
| 50) Regarding your <i>relationships</i> with spouse/partner/boyfriend/girlfriend, how would you rate your current level of satisfaction? | |
| a) □ Very Satisfied | |
| b) □ Satisfied | |
| c) Somewhat Satisfied | |
| d) □ Not satisfied | |
| e) Very Dissatisfied | |
| f) No relationships at this time | |
| 51) Regarding your relationships with <i>family</i> members, how would you rate your current level of satisfaction? | |
| a) □ Very Satisfied | |
| b) □ Satisfied | |
| c) Somewhat Satisfied | |
| d) □ Not satisfied | |
| e) Very Dissatisfied | |
| f) □ No family relationships at this time | |
| 52a) Do you face challenges in social situations as a result of your LD? | |
| 52b) If yes, what would you say are the biggest challenges you <i>currently</i> face in social situations due to your LD? | |
| 53a) Do you feel that your LD has given you an advantage in social situations? □ Yes □ No | |
| 53b) If yes, how? | |
| 54a) What kind of goals (other than career) do you wish to achieve in the near future? (i.e. in 5 years) | |
| a) □ Buy property (i.e. house, apartment, condo etc.) | |
| b) Get married | |
| c) Have a steady relationship | |
| d) Start a family | |
| e) □ Travel | |

| f) Finish school |
|--|
| g) Pursue further education |
| h) □ Be debt free i) □ Other: |
| i) Other: |
| 54b) Please elaborate on your priorities: |
| IMPACT OF LEARNING DISABILITY |
| 55a) Earlier in the survey, you were asked what specific challenges you currently face in terms of school, employment and social situations. |
| Are there any other ways you feel that your LD affects you at this time that you did not mention above? (i.e. your relationships with family and friends, grocery shopping, etc.) |
| \Box Yes \Box No |
| 55b) If yes, please elaborate: |
| 56a) Do you feel that you have learned how to manage your LD? ☐ Yes ☐ No |
| 56b) If yes, please describe the ways that you have managed your LD? |
| 57) Are there any supports that you used in the pilot program (i.e. accommodations, assistive technology, learning strategies, etc.) which you do not have access to now but which you feel you would benefit from at this time? |
| 58) Congratulations! You have now completed your 5th survey in a 10-year longitudinal study. We intend to continue to gauge your valuable responses, and to reward you – with a comprehensive report and a gift each year – for your contribution to this important research. Additionally, at the end of the study we will be giving a special gift to those participants who have been contributing to the study for its duration. |
| Thank you. |
| Do you intend to stay with <i>Transitions</i> for the full 10 years of the study? □ Yes □ No |
| Please elaborate: |

SECTION VI: CONCLUSION 61) Additional comments/suggestions: SECTION VII: CONTACT INFORMATION Permanent Mailing Address: Current Mailing Address: Home Telephone #: Alternate Telephone #: Most Current Email: Secondary Email:

THANK YOU!

IX. APPENDICES

Definition of a Learning Disability

There were **1242** students deemed eligible, and served by the pilot programs between 1998 and 2002. It is from this pool of persons with learning disabilities that the *Transitions* cohort was created. We contacted as many former pilot students as we could find and asked if they would agree to participate in the longitudinal study. All former LOTF pilot students are welcome to become involved in *Transitions* at any time in the study.

However, it is important to remember that this cohort has been carefully selected in the sense that all participants have previously undergone a rigorous process to determine the validity of their learning disability. In examining the literature on learning disabilities, this issue is often not dealt with. Studies generally report on populations of persons or, more likely, students with learning disabilities without referencing how it was determined that they have a learning disability. This is a critical piece for researchers to consider in the field of learning disabilities.

Relying on secondary-school assessments, IPRC identification, I.E.P.s, etc. will not provide dependable information on the validity of claim to learning disability. Incredibly, during the pilot years, between 70% to 100% of the newly enrolled pilot students had inadequate or no documentation of their learning disabilities. For this reason, LOTF imposed a stringent documentation criterion for pilot projects before they could claim a student eligible for entry into the program. (See LOTF Diagnostic and Documentation Criteria for Pilot Project Eligibility for Students with Specific Learning Disabilities, LOTF, January, 2000). There is no precedent in the field and practice of providing service to students with learning disabilities for such a documentation requirement to be fulfilled before a student becomes eligible for inclusion into a program.

The following is a breakdown of the culminate data showing how the number 1242 was arrived at in determining a validated population of students with learning disabilities:

- Students deemed eligible through the validation process: 987
- Students who met the first year participation criteria and were exempted from the formalised validation process, usually because they did not continue beyond the first year: 138
- Students exempted from the validation, since they were only involved in the summer projects:117
- Students who were deemed ineligible through the Validation process, i.e. excluded from the database: 302

The Enhanced Services Fund has maintained LOTF's commitment to serving a validated population of students with learning disabilities. All colleges and universities in Ontario are eligible to receive funding to create two specialised positions to assist students with

learning disabilities, those of Learning Strategist and Assistive Technologist, based on the recommendations within LOTF's Final Report. Currently, all 45 post-secondary institutions have these positions, or a combination of these positions in place. This support structure is unique in the world.

In order to qualify for funding, post-secondary institutions must currently adhere to the Learning Disabilities Association of Ontario's definition of a learning disability. Psychoeducational assessments use the following LDAO definition in its diagnosis of learning disability:

LDAO Definition of Learning Disabilities

"Learning Disabilities" refers to a variety of disorders that affect the acquisition, retention, understanding and organization or use of verbal and/or non-verbal information. These disorders result from impairments in one or more psychological processes related to learning in combination with otherwise average abilities essential for thinking and reasoning. Learning disabilities are specific, not global, impairments and as such are distinct from intellectual disabilities.

Learning disabilities range in severity and invariably interfere with the acquisition and use of one or more of the following important skills:

- oral language (e.g., listening, speaking, understanding)
- reading (e.g., decoding, comprehension)
- written language (e.g., spelling, written expression)
- mathematics (e.g., computation, problem solving)

Learning disabilities may also cause difficulties with organisational skills, social perception and social interaction.

The impairments are generally life-long. However, their effects may be expressed differently over time, depending on the match between the demands of the environment and the individual's characteristics. Some impairments may be noted during the pre-school years, while others may not become evident until much later. During the school years, learning disabilities are suggested by unexpectedly low academic achievement or achievement that is sustainable only by extremely high levels of effort and support.

Learning disabilities are due to genetic, other congenital and/or acquired neuro-biological factors. They are not caused by factors such as cultural or language differences, inadequate or inappropriate instruction, socio-economic status or lack of motivation, although any one of these and other factors may compound the impact of learning disabilities. Frequently, learning disabilities co-exist with other conditions, including attentional, behavioural and emotional disorders, sensory impairments or other medical

conditions.

For success, persons with learning disabilities require specialised interventions at home, school, community and workplace settings, appropriate to their individual strengths and needs, including:

- specific skill instruction;
- the development of compensatory strategies;
- the development of self-advocacy skills;
- appropriate accommodations.

The Context for LOTF and Transitions

The Learning Opportunities Task Force (LOTF) permanently altered the post-secondary landscape for students with learning disabilities between 1998 and 2002. It is simply a statement of fact that the pilot programs established by LOTF during this period were unprecedented in the world. The Enhanced Service Fund and a number of innovative projects that have been entrenched since 2002 continue to position the Ministry of Training, Colleges and Universities as unique in the world for its provision of services to students with learning disabilities.

In 1997, LOTF was established under the leadership of Dr. Bette Stephenson, with the following mandate:

- To improve the transition of students with specific learning disabilities from secondary school to post-secondary education.
- To enhance the services and supports that students with learning disabilities receive within the post-secondary educational sector, such that they can complete their education successfully.

Perhaps the most important fact to emphasize about LOTF's functioning during the pilot years is that all of its assumptions, programs, evaluations and ultimately its recommendations as reflected in its final report, were based upon research. LOTF was established as a research project in order to substantiate and monitor the progress it made towards creating a level playing field for post-secondary students with learning disabilities in Ontario.

Between 1998 and 2002, 1242 students met the very rigorous LOTF participation criteria, received pilot services, and participated in pilot projects' evaluation process, which resulted in over 3000 completed questionnaires. These facts made the LOTF project the largest research endeavour of its kind in the learning disabilities field, unique both in its depth of enquiry and the selection process of its participants.

In order to achieve baseline consistency for pilot participant evaluation measures, LOTF developed student Success Indicators, which are contained in the LOTF vision statement. These indicators are articulated as:

- Entry into an academic program of the student's choice, provided that the student meets standard entrance requirements;
- Successful meeting of the essential requirements of the program, although the manner in which the students demonstrates mastery may be altered by academic accommodations, programme modifications or the use of coping and compensatory strategies, but with no change to standards or outcomes;

- Graduation from the student's chosen program and institution;
- Progression of the requisite skills to pass any licensing requirements, with appropriate
 accommodations, if needed, related to the field of study or career which he or she has
 chosen.
- Being employment ready;
- Being sufficiently job ready so that he or she can advocate for any job accommodations that may be required in order to obtain and maintain employment.

The primary vehicle for evaluating the student Success Indicators were the students themselves. The LOTF database contained more than 3000 student questionnaires collected as intake, progress, and exit questionnaires over a period of four years.

The LOTF final report contains seven Key Findings and 24 Recommendations based on this empirical evidence. They first key finding reads as follows:

Students with learning disabilities are as able to succeed in post-secondary education as their non-disabled peers, provided that their transition to post-secondary education is appropriately facilitated.

This statement is a powerful endorsement of the success of LOTF initiatives during the pilot years. Consequently, the report articulates the following recommendation:

Proven transition programming should be available to students with learning disabilities who are going on to post-secondary education and are interested in participating in such opportunities.

Project Advance was a very successful comprehensive summer transition program that was created during the pilot years. LOTF established another seven programs at four colleges and three universities at the end of the pilot years, and these Summer Institutes have continued under MTCU along with Project Advance. Other innovative transition programs such as the Adopt-a-School continue under MTCU, all of which are intended to assist students with entry into post-secondary education.

Early during the pilot experience, LOTF recognized the need for comprehensive programming to assist with the transition from secondary to post-secondary education. However, it was only as the first cohort of LOTF pilot students began to graduate from post-secondary education that the need for transitional support into the work force became fully understood. Dealing with this realization may become one of the most important contributions of this longitudinal study to the field of learning disabilities.

The Application of Knowledge

The pilot programs were well funded and students with learning disabilities were offered a comprehensive range of programs and services between 1998 and 2002. Pilot students consistently identified that, in addition to an improved understanding of their learning disabilities, they most valued:

- Provision of learning strategy supports by appropriately qualified and engaged staff, and
- Access to and instruction in assistive technology from staff with expertise in both the technology itself and learning disabilities.

Currently, all institutions provide services, supports, and accommodations to students with disabilities. These services are quite diverse and are funded by the Ministry's Accessibility Fund allocation. It was on the basis of these Key Findings and LOTF's preliminary recommendation to the Ministry of Training, Colleges and Universities that the Enhanced Services Fund (ESF) was created at colleges and universities in Ontario in September, 2002. It is through this dedicated funding envelope that students with learning disabilities are provided with the support of knowledgeable Learning Strategists and Assistive Technologists.

Because of it intensive reliance on research upon which its key findings are based, LOTF was able to identify which component worked particularly well for students during the pilot years, and then apply that knowledge to its final report recommendations.

The supporting data for the creation of the Enhanced Services Fund is as follows:

- Pilot institutions reported that 1120 pilot students utilised assistive technology and 1086 pilot students utilised learning and meta-cognitive strategies during the pilot period.
- Pilot students cited assistive technology and learning meta-cognitive strategies as the most useful program components provided to them by the pilot projects
- 86% of pilot students indicated that they had used and/or plan to use assistive technology
- 94% of pilot students indicated that they had used and/or plan to use learning strategy and meta-cognitive training supports.

On the basis of research, LOTF was able to refine certain components from each of the unique pilot programs into a set of focused supports that best assist students with learning disabilities to become successful and independent learners. Many of the institutions providing these services include transition programming into and out of post-secondary education, self-advocacy training as well as career counselling and training in their

Enhanced Services Projects. Thus, the justification for ESF funding was easy to produce and accountability is equally easy to establish at any given time. In fact, the Enhanced Services Fund was purposely established to set an exemplary standard of accountability to the Ministry of Training, Colleges and Universities. If completion of post-secondary education was all that persons with learning disabilities required in order to be successful, the present level of supports, accountability and enquiry would suffice.

Beyond Success Indicators

As stated, all LOTF research and evaluations emphasized, above all else, input from pilot students with learning disabilities. The information gathered provided that all targeted Success Indicators were met. ESF continues to provide students with learning disabilities with comprehensive program components in a more focused fashion based on the pilot experience.

The six Success Indicators articulated in 1998 were certainly ambitious, particularly given the difficulties encountered by students leading up to the establishment of the pilots. Case in point, despite strong legislation in the form of Bill 82, and later in the Education Act, which requires school boards to identify and provide appropriate service to all students with special needs, over 80% of the pilot students arrived at college or university without adequate documentation.

As well, 35% of the pilot students repeated at least one grade, and only 56% were identified as having a learning disability during primary or secondary school. Of these, 70% stated that they received some special education in elementary school, but in senior grades, there was significantly less help available—all of which is indicative of failure of the system to provide a proper level of specialized programming for which it was, and is, legislated. Not surprisingly, 85% of incoming pilot students reported that their learning disabilities mostly affect their academic functioning.

Thus the creation of the Learning Opportunities Task Force in 1997, with a five year allocation of \$30 million, was based upon a fundamental assumption:

"There is an assumption that attending and graduatin from post-secondary educational programs improves employment opportunities, which provide higher wages, which increases financial and personal independence and thus enhances the overall quality of the lives of its graduates; the question remains as to whether this assumption is true for young men and women who have learning disabilities." (Levine and Nourse, 231)

LOTF answered the first part of this question by achieving and often exceeding expectations related to Success Indicators. Answering the second half of this question, which is essentially related to quality of life, requires in-depth, follow-up research of the kind only available through the use of a longitudinal study, relying upon both quantitative

and qualitative research methods:

"Studies that focus on isolated factors such as employment at a single point in time do not provide and adequate picture of a graduate's situation. In order to understand adjustment patterns for individuals, we need to develop composite measures to examine multiple components as they interact." Thus, in addition to comparing multiple components using quantitative measures, "we need to employ qualitative analytic techniques to provide a much-needed look at the factors that affect long-term adjustment and paint a picture of post-school life that is currently unavailable, given the constraints of quantitative research methods." (Levine and Nourse 231)

In the province of Ontario, we have concentrated our collective efforts on education for good reason. As students entered into jobs, careers and all facets of life after the pilot experience, LOTF was quite confident that they did so armed with real benefits to assist them in reaching their potential. We have continued with, and do not see any reason to be dissuaded from the assumption that what matters most in determining success, broadly speaking, is a good education appropriately applied.

Still, even as LOTF was satisfied with student achievement of Success Indicators, there were lingering questions about the success of students with learning disabilities after they left the pilot programs. However positive the educational experience, we know that learning disabilities are very much a life-long condition. Therefore, we could not help but wonder if we had accommodated and served students well, by not only helping them to pass into and out of post-secondary education, but also to attain the skills they need to become fully successful after their post-secondary years.

We asked ourselves if the effects of the pilot experience would continue beyond the achievement of Success Indicators. Most of al, we wondered if our pilot population had attained resiliency and permanent skills, and if the pilot experience offered students with learning disabilities the potential to improve their lives for themselves.

"What happens 5 years beyond the transition period, or 10 years beyond, has been of less concern to the field. Questions have arisen as to how adequately youth with learning disabilities served by special education are prepared to cope in later years, particularly after the major portion of services previously provided are no longer available. Some follow-up investigators have attempted to respond to this query, but the majority have simply combined data from youth in transition, youth in floundering period, and youth in their 20s who are well into the struggle of adjusting to adult life. It is clear that the expectations and realities for these different periods of time are quite different." (Levine and Nourse 220)

The Transitions Longitudinal Study

The problem with asking these questions is that the answers do not come easily. The only way to know what happens in the post pilot years is to follow a significant portion of the population of a period of some years. Longitudinal studies are not undertaken lightly. They tend to be expensive and difficult to conduct. In addition, contemplating doing a forensic audit, that is, studying a population that has disbanded for two full years by the time the study had begun, is highly unusual. Still, LOTF determined that the uniqueness of this research project and its population of students with learning disabilities was simply too important to risk not tapping into.

Consequently, the *Transitions* Longitudinal Study was launched with the following goals in mind:

- To inform persons with learning disabilities about their own potential and their continuing obstacles and successes in order to assist them in making positive changes for themselves throughout their lives.
- To inform government and policy makers about the needs and abilities of students and persons with learning disabilities in order to make a positive contribution to public policy and government sponsored programs and services, both in terms of fiscal responsibility and program effectiveness.
- To inform post-secondary institutions with the intent of influencing their existing and evolving programs for students with learning disabilities, primarily ESF.
- To inform prospective employers and government departments involved with job training and career and employment issues about the needs and abilities of adults with learning disabilities.
- Finally, as an overarching goal, to broaden and keep relevant the Ministry of Training, Colleges and Universities' body of knowledge and information, regarding the efficacy of specialized programs and services for students with learning disabilities.

In order to achieve these goals, *Transitions* decided to engage a population of post-pilot participants, and to conduct an annual survey asking questions in the following categories:

- Education—to assess participants' views about their LOTF and post-secondary experience from a more distant perspective, and, if relevant, their current educational involvement.
- Employment—to investigate the successes and areas of difficulty participants are experiencing in the labour market, and in finding career-related employment.
- Social—given that a learning disability is a life-long condition, and affects areas of functioning other than education and employment, examining social relationships, living arrangements and how participants spend their non-working time is essential to establishing a holistic profile of our population for the duration of the study.

Why choose to do a Longitudinal Study?

In order to evaluate former pilot students on the basis of education, employment, and social factors over an extended period of time, we chose to continue gathering data through the use of longitudinal surveys. A definition of the longitudinal design is an appropriate place to begin a discussion of methodology.

"Longitudinal designs are used to describe patterns of change in individuals over time and to establish the direction (positive/negative, increasing/decreasing) and magnitude of relationships among conditions, events, treatments, and later outcomes as measured as dependent variables." (Raskind et al. 267)

In utilizing the longitudinal design, we are able to directly observe the changes in our population through each phase and to attempt to describe and/or explain them. The three main types of longitudinal surveys are trend studies, cohort studies, and panel studies. Since we wished to contact the same sample of people each time and ask them similar questions, following the subjects forward in time, we chose to follow the model of a panel study. Although they are quite difficult to conduct, panel studies generate extremely specific and useful explanations.

It is worth noting that longitudinal research carries with it some potential risks, which have a strong impact on the research design. In fact, the various strengths and weaknesses of longitudinal research was the subject of an International Symposium in 1995.

"Participants acknowledged that longitudinal research involves a substantial investment of resources for a significant period of time. They considered it to be "risky business" as compared to short-term studies (i.e. 6 months), in the sense that it is "unclear as to how things will work out in the long run." For example, longitudinal designs are at greater risk for subject attrition, and losing the necessary funds to complete a project. Therefore, participants stressed, everything possible must be done to obviate that risk over time, including conducting longitudinal studies at institutions with high credibility, capability, and stability, as well as ensuring the presence of a stable funding mechanism. Although participants thoroughly acknowledged the problems and risks associated with longitudinal research, they agreed that only longitudinal designs have the power to answer certain questions." (Raskind et al. 269)

What are these certain questions that only longitudinal designs can answer? Simply put, longitudinal research employs quantitative and qualitative data to help identify factors that impact on a population over a period of time.

"The concerns about the natural history of learning disabilities are of more than theoretical interest since they reflect directly on the validity and effectiveness of treatment programs. Furthermore, examination of the natural history of LD provides insights into

whether or not observed changes are due to treatment effects or maturation. Long-term assessment, in addition to providing information about treatment efficacy, also provide insights into the extent to which the consequences of LD may be attenuated or accentuated by associated factors." (Raskind et al. 269)

Important to an initial discussion of methodology, it must be noted that a good longitudinal design is dynamic—that is, it anticipates, allows for, and indeed embraces, continual change.

"Furthermore, the factors/variables under analysis may have to change across time. For example, an interview with questions about teaching and homework may be quite important in a longitudinal study of elementary school children with learning disabilities, yet at age 35 might be quite irrelevant to the subjects' present contexts of interaction. Questions regarding work, independent living, marriage and children are likely to have much greater import at 35." (Raskind et al. 274)

It is the nature of change that is at the heart of longitudinal design. As change is noted and trends evolve, the Transitions longitudinal study will probe, with specific questions, areas of interest and concern. Ultimately, the longitudinal research design is about uncovering a portrait of its subjects through a series of comprehensive pictures taken at regular intervals

"Participants agreed that only through studying a broader spectrum of contexts and domains, and a variety of data sources, will we be able to see the whole picture and understand how the complex web of biological, and genetic factors interact with each other and particular environments to produce specific outcomes in persons with learning disabilities." (Raskind et al. 274)