Transitions Longitudinal Study

7th Annual & Final Report to the Ministry of Training, Colleges and Universities

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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

After seven extremely productive years, the *Transitions* Longitudinal Study has officially ended. Originally the study was to have been for a ten year term, however due to funding cutbacks, *Transitions* has been shorten to seven. Though not ideal, much has been achieved, and both the success of our LD participants, and the supports funded by the Ministry of Training Colleges and Universities should be celebrated. This last report will profile an impressive and successful cohort of adults with learning disabilities as it provides its research findings. The disappointment of having to end three years early is more than balanced by the remarkable progress that the *Transitions* group has made since the LOTF pilot years.

In order to show the extent of progress that *Transitions* participants have made, we begin by recapping how our journey brought us to this point.

1. May 6th, 1997, $30 million is allocated to the Learning Opportunities Task Force (LOTF), under the leadership of Dr. Better Stephenson, "to establish pilot projects at the college and university level, to provide real help to learning disabled students in a meaningful way."

2. 1998-2002 --Eight pilot projects are chosen at 13 institutions, which are intensely research focused and outcome driven in terms of documentation requirements, standards of service, legitimacy of the LD issue, and the establishment of 'best practices.' As a consequence, LOTF establishes Ontario and MTCU as a world leader in the provision of support for students with learning disabilities. In its final report, LOTF's Key finding related to student success concludes, "Students with learning disabilities are as able to succeed in post-secondary education as their non-disabled peers, provided that, their elementary and secondary years were properly supported, their Transitions into post-secondary education was appropriately facilitated, with appropriate supports offered, and the students choose to use them." (p.32)

3. Meanwhile, even as late as 2007, the Learning Disabilities Association of Canada released a report (Putting a Canadian Face on Learning Disabilities, www.pacfold.ca) that outlined many serious challenges faced by the LD population, including high levels of distress, depression, anxiety disorders and poorer physical health than the general population. This profile is reminiscent of the LD profile of twenty years ago, but incredibly does not take into consideration the leveling potential of post-secondary education attainment as evidenced in the *Transitions* Longitudinal Study.

4. For it is while the LDAC report was being researched and written that LOTF begun a longitudinal study of its former students in order to determine what success or failure they were experiencing as a result of its interventions. Began in 2004, a full two years after the cessation of LOTF supports, *Transitions* is markedly different than the LDAC profile. In terms of education, career and social adjustment, participants are mostly functioning on par with their peers in the general population. Given this fact, *Transitions* makes a powerful contribution to the argument that LD students should be identified early, and properly and appropriately supported throughout their education. This social investment is not only worth making, it is essential for both the economy and for the realization of human potential.

Bottom Line:

Many of the 'best practices' established by LOTF are now embedded in Disability Offices in Ontario, resulting in large and growing numbers of students with learning disabilities completing post-secondary education. *Transitions* has shown the value of post-secondary education attainment, by allowing a historically disadvantaged group of people to compete and achieve with the general population. Though this finding is not particularly dramatic it becomes significant if one compares the accomplishments of the *Transitions* cohort to adults with learning disabilities without post-secondary educational attainment. The LOTF research project and the *Transitions* longitudinal study prove the efficacy of MTCU's Accessibility Fund for Students with Disabilities, which funds provincial post-secondary disability offices in Ontario.

The 2009 profile of *Transitions* Trends:

Finding #1: *Participants place a high value on post-secondary education.*

Successful educational outcomes have always been a concern for people with learning disabilities. As researchers we knew that our cohort considered education a high priority, but we were surprised that 42 people successfully completed a second post-secondary program, and twelve even managed to complete three full programs!

Finding #2: *Transitions participants have a higher than average retention rate than the general population in post-secondary education.*

Certainly one of the most impressive Findings in this study is the fact that after seven years, 91% of *Transitions* participants have successfully completed at least one post-secondary program. This figure is much higher than the provincial graduation rate, which after seven years is only 76.3% (source, 2010 University Rankings, Macleans Magazine, p. 158, November 22, 2010. We took an average from the seven year Ontario graduation list of 16 universities. Though the *Transitions* figure is achieved after seven years in the study, and therefore for most represents a longer period of time, extending the Ontario University time period further would certainly not bring the graduation rate near 91%. Our *Transitions* higher graduation rate—which is the baseline for success with regard to post-secondary education success—is a critical achievement for a cohort of people traditionally known for dropping out of, or failing at school).

Finding #3: *Transitions participants combine post-secondary education and work reasonably well.*

Throughout the years of the study, *Transitions* participants who have continued with post-secondary education have often worked in paid positions as well. In 2010, 72% of participants

currently studying were also working.

Finding #4: *A high percentage of Transitions participants are living with their parents or other family members.*

The percentage of *Transitions* participants living with their parents has gone down throughout the seven years of the study to close to the General population figure of 20%, but has consistently been higher and is confirmed as a finding. The *Transitions* figure of 22% is markedly lower than the LDAC report figure of 54.4% for Ontario residents aged 22-29.

Finding #5: *Financial concerns are impacting on Transitions participants' life decisions.*

Though most participants have been working for some years, in the 7th year of the *Transitions* Study, 66% of participants still report having student loans, and 43% report being in considerable debt from student loans.

Finding #6: *The majority of Transitions participants, upon graduation, feel prepared to seek* employment.

As we conclude *Transitions*, 77% of participants who have graduated and are not currently working report feeling prepared to seek employment.

Finding #7: *Transitions participants are earning salaries that are comparable to their peers in the general population, and are better than other Ontario Residents 22-29 with learning disabilities.*

Salaries are close to the general population and markedly higher than adults with learning disabilities of similar age, without successful post-secondary educational attainment as reflected in the LDAC report. In the LDAC report few adults with learning disabilities earn more than $20,000 per year, whereas 93% of employed *Transitions* people earn $20,000 or more annually.

Finding #8: *Field of Study likely influences low salaries of Transitions participants*.

To the extent that *Transitions* people have lower salaries, the difference is reflected in provincial occupational salary charts, rather than being intrinsic to having a learning disability. Most participants chose Arts and Social Science programs with earnings that are somewhat lower than professional programs.

Finding #9: *Transitions participants place great emphasis on educational and career goals, while social goals remain relatively low.*

Goals such as to "Be debt free" or "Buy Property" take a higher priority than "to Have a steady relationship" or "Get married" for our *Transitions* cohort. *Transitions* people have consistently reported being driven to succeed.

Finding #10: *A high number of Transitions participants engage in volunteer work*.

In addition to the pressures of school, work and family obligations, over the years our

Transitions group has increased its volunteer work from 23% in 2005 to 34% in 2010.

Finding #11: *A high number of Transitions participants engage in physical activity.*

Since exercise is known to be a major contributor to individual well-being and life balance, the question of exercise has been asked and compared to the general population throughout the study. Incredibly, 58% of *Transitions* people exercise regularly compared to 29% in the general population.

Finding #12: *Transitions participants appear to be resilient in their social relationships*.

In 2010, 58% of participants are either satisfied or very satisfied with their relationships, with 31% reporting no relationship at this time. As well, 75% of *Transitions* people report being satisfied or very satisfied with their family relationships.

Finding #13: *Transitions participants disclose their learning disability at work only when necessary for the job. Significantly more women working full-time disclose their learning disability at work than men*.

Since the beginning of *Transitions* , the percentage of people disclosing their learning disability has risen from 30% in 2004 to 55% of people currently employed-- the rate of increase being determined by when participants feel they need to disclose to get the job done. The ratio of participants who disclose is approximately three times higher for women than men.

Finding #14: *Few participants who are currently employed use accommodations and/or assistive technology at work.*

In the last year of our study, only 20% of participants use accommodations or assistive technology at work.

Finding #15: *Transitions participants have good relationships with their co-workers.*

In 2010, an astonishing 93% of participants report having a comfortable relationship with colleagues.

Finding #16: *An overwhelming percentage of Transitions participants experience job satisfaction.*

In 2010, 74% of employed *Transitions* report that they have achieved a healthy work/life balance.

Finding #17: *Overall, Transitions participants feel they have learned how to manage their learning disability.*

At the conclusion of *Transitions,* an impressive 89% of participants feel that they have successfully learned to manage their learning disability.

Transitions Central Finding

The *Transitions* Longitudinal Study began in 2004 with the intent of examining the themes of continued educational attainment, employment and career success, and social engagement. It is fair to say that these avenues of success and social functioning have historically been difficult issues for adults with learning disabilities. In fact, as late as 2007, the LDAC's report, "Putting a Canadian Face on Learning Disabilities" presents a portrait of failure in every aspect of comparison one could make with the Canadian general population.

Our *Transitions* cohort is markedly different from the LDAC portrait. The Learning Opportunities Task Force made the claim at the conclusion of its work that students with learning disabilities could be as successful as students in the general population with the proper support. *Transitions* Findings further support the LOTF final report, and expand upon what this actually means to the lives of adults with learning disabilities, with the following claim: *Persons with learning disabilities who have successfully completed post-secondary education can be as successful as people in the general population with regard to both career achievement and social functioning.*

As we have said throughout this study, achieving parity with the general population may not seem to be a huge achievement, but given the historical perspective, **it is in fact the gold standard of success**.

Having examined and analyzed the data as well as read and listened to the comments and stories from *Transitions* participants these seven years, we are confident in focusing towards one central findings as essential to all other findings: **post-secondary educational attainment**. If we as a society are to enhance the opportunity of success for people with learning disabilities in a meaningful way, that way is now clear. And for bright students with learning disabilities who do not get the support they need, and as a consequence do not have the opportunity to attend college or university, we have failed them.

The importance of post secondary educational attainment to our *Transitions* cohort manifested itself concretely in three ways:

1. Seven years after original enrolment, the provincial average graduation rate is just over 76.3%, whereas the *Transitions* rate of graduation is 91%. *Transitions* people have the advantage of beginning their programs before the commencement of the study, but the general population graduation rate is unlikely to reach 91%, how ever much time is taken to measure results.

2. Of the 91% who graduated consider these impressive facts: 42 students have graduated twice, and 12 have graduated three times!

3. Twelve participants have degrees in the field of education, two have Master's degrees in Education, two trained as education assistants, and one has a diploma in early childhood education. One of the most consistent themes from our participants, including focus groups during the LOTF days, is the strong desire to give back because they were supported. The number of participants who chose their careers in the field of education is much higher than in the general public, and speaks to the everlasting value *Transitions* people place on post-secondary education. In giving back, our *Transitions* people are determined to take nothing for granted.

4. Even after long years of study and for some with one or more degrees or diplomas completed, in 2010, 75% of Transitions participants still studying said they planned to return to school after their latest graduation. Of those who do not plan to return to school, three are PhD candidates, and upon graduation will have completed the penultimate level of post-secondary attainment.

So what are the implications of the Transitions Findings?

1. ***Transitions*** **demonstrates that that having a learning disability is not an inability to learn.** Students with learning disabilities who make it into post-secondary programs, with few exceptions, attribute much of their success to supportive parents. Once in college or university, support and accommodations were dependably received (particularly in Ontario in the last 15 years), providing that students had learned to advocate for themselves. Since students are required to register with the disability office in order to receive the appropriate supports, LD students cannot be successful unless they self-identify, participate in the documentation process and follow through with the accommodation procedures (which is not easy but may have an unforeseen and positive effect with regard to maintaining engagement and developing resiliency). Once students register with the disability office they are assigned a disability coordinator, and one of the most consistent themes in *Transitions* about the pilot years is that students attribute much of their post-secondary success to the positive and supportive relationship with their coordinator. It is important to note that in order to get the support and accommodations that they require, students with learning disabilities are necessarily *engaged,* and as a consequence of working through issues, become *resilient*.
2. **Engagement and Resilience are essential to success.** Early on the Learning Opportunities Task Force decided to focus their supports on creating personal resiliency. LOTF was adamant that interventions and supports would contribute to independence rather than foster dependence. This is important for a population that requires significant and pointed support in order to succeed. Being both engaged and resilient has served people well after graduation.

For the past seven years, the *Transitions* cohort has had success, generally comparing very close to the general population with regard to post-secondary attainment, employment and careers, and in social relationships. When compared to the adult LD population in the 2007 LDAC report, the Transition cohort success is remarkable, beyond what anyone would have imagined possible 20 years ago. Though a learning disability is a lifelong condition, it is not static. Clearly a learning disability can be managed and success is determined by personal factors such remaining socially engaged and applying personal resiliency.

3. The LOTF/ *Transitions* model is transferable.

The supportive model developed by LOTF, reinforced by *Transitions* , and consistent with Human Rights legislation, accommodates individual aspects of one's learning disability. Psychoeducational assessments determine what individual processing problems are, what the individual strengths and weakness might be, and students with learning disabilities who have been properly briefed understand their own metacognition far beyond what exists among the general population. Disability coordinators understand their students, put supports in place based on the psychoeducational assessment, and establish a supportive and meaningful rapport with their students. In this sense students who are well supported by disability offices employing these *best practices* are supported far more than any students in the general population. What student would not benefit from working closely with someone who knows them well and develops a close working relationship? In this sense the LOTF model is both specific to the learning disability, and we would argue, has great potential to be successfully applied to other groups of students who fall between the cracks of the conventional student service model.

Perhaps there is no greater need for the application of the supportive LD model than among students experiencing mental health difficulties. Throughout North America, colleges and universities are trying to contend with a mental health crisis. Through statistics are difficult to determine, there seems to be some consensus that as many as 20% of post-secondary students are at risk for becoming mentally ill during their college and university years. Given that the percentage of students registered in Ontario disability offices has been rising each year, and is currently at approximately 6% for all disability groups, a figure of 20% mental illness potential is staggering. Students at risk for mental health difficulties are often fluid in their condition for a period of time, and could benefit greatly from this comprehensive, individualistic support model. That is, for many students there may be some time before being assigned a DSM 4 diagnosis, when the availability of an individualized and comprehensive support model could make the difference between good mental health and certain mental illness. Applying targeted interventions to these students is a great investment in human and social capital. Any motivated student will benefit from working with someone who understands them well, cares if they succeed or fail, and engages them in doing what they need to do to be healthy, successful and resilient human beings.

Transitions Longitudinal Study Recommendations

The work from the Learning Opportunities Task Force between 1997 and 2002, and the completion of the *Transitions* Longitudinal Study between 2004 and 2011, comprise a body of work that is unique to longitudinal research as well as to the field of learning disabilities. This body of work does more than examine 'the problem,' or theorize about possible solutions. Together LOTF and *Transitions* established workable solutions based on empirical evidence; they measured the efficacy of these solutions in the areas that matter most to people who strive to be successful: educational attainment, employment and career progression, and relationships.

We now know that students with learning disabilities can be as successful as the general population. We also know from *Transitions* that persons with learning disabilities can differentiate themselves from the grim reality of Canadians with learning disabilities (LDAC 2007 report, www.pacfold.ca) by successful post-secondary attainment, appropriately applied.

As a consequence of this comparison, we have concluded, with conviction, that post-secondary education attainment is more, perhaps far more important for adults with learning disabilities than for the general population.

In focus groups at the beginning of the LOTF research project, participants consistently said that they only were able to get to college or university because of the support of their parents, or for some, because of the special help received from a particularly dedicated teacher. For those who have supportive parents or who find supportive teachers this is fine, but it begs the question, what happens to all those capable students with learning disabilities who do not have parents or that teacher who goes above and beyond the call of duty? The sense of satisfaction in seeing students progress from LOTF support to seven years of *Transitions* is tempered by the sense of loss for those students with learning disabilities who did not receive the support required for them to be successful. With this sobering thought in mind, as well as a sense of optimism regarding the progress that has been made, the following educational recommendations are made:

Overall

1. All teacher training for certification should include comprehensive instruction on learning disabilities.
2. Psychologists are consistent about definitions and agree upon criteria for diagnosis.

Primary School

1. It is essential that students with disabilities be assessed and identified in their early years.
2. Comprehensive annual individual education plans are developed and based on ongoing, meaningful assessment of student need.
3. High quality adaptive technology assessment and training begins early and continues as the student progresses.

Secondary School

1. Metacognitive training is given to students properly identified to allow them to develop their own academic strategies, and as a consequence, personal resiliency.
2. Well trained teachers are given adequate time, training and resources in order to conduct annual reviews of educational plans, with the student taking responsibility and an active role (with the goal of creating life-long, independent learners).
3. Transition programs such as MTCU's Summer Transition Program is expanded to transition programming for the full academic year for all LD students intending to enroll at college or university. Most important, transition programming should be extended back to as early as grade 9, so that LD students are able to make informed choices about realistic post-secondary opportunities.

Post-secondary Education

1. Strategic transition is supported with education plans and updated assessments provided to post-secondary disability office coordinators before the commencement of classes.
2. Timely and frequent access for students to knowledgeable disability coordinators is fully supported for all students' entire years of study.
3. Career and personal counseling is available to students throughout their entire years of study.
4. Strategic transition is provided into the workplace including workplace co-op, mentoring, as well as opportunities to gain work experience to build one's resume.
5. The Ministry of Training Colleges and Universities' AFSD (Accessibility Fund for Students with Disabilities) be expanded in order to keep pace with the growing numbers of students with disabilities, whose requirement to successfully complete post-secondary education has been shown to be of greater importance than for the general population.

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I. METHODOLOGY

The seventh *Transitions* survey was launched on January 1, 2010, and the surveying ended on May 30th, 2010. 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 102, which is almost half the original number of participants. Overall, compared to other longitudinal studies, the *Transitions* study has a high retention rate.

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 seventh 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, 2010, 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 seventh 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 seventh *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 we believe created a *Transitions* community throughout the course of the study.

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 final 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 were 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 part-time 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, On Their Own: Your Adult Child with Learning Disabilities and ADHD. 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 co-workers 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 terms to be used in the following sections:

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.

After seven years of following *Transitions* participants, 91% have graduated from a post-secondary institution at least once (93 of 102 participants in 2010). As in previous reports, the number who returned to school after graduation was remarkably high.

In 2010, 22 of 102 participants (22%) reported being in post-secondary education, with 18 of these participants having returned to post-secondary school after graduation. The number of participants in school has been slowly declining. In 2007, 30% of participants were in school, while in 2008, 32% were in school. The 2010 figure is much closer to the 2009 figure of 24% in school.

Similar to 2009, the 2010 data shows that twelve of our participants have graduated from three different programs, and 42 have graduated from two different programs. We believe this shows that participants place a high value on post-secondary education. Therefore, this is the first Finding of this final report.

Finding #1: Participants place a high value in post-secondary education.

III. 1. General Education Statistics

As is to be expected, the number of participants in the *7th Annual Report* who report that they are currently studying is lower than previous figures. In 2010, 22% of participants reported being in post-secondary education. The number of participants attending a post-secondary institution has decreased steadily since *Transitions* began in 2005 (45% in 2005 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 2010 is 31.01.

Fifteen participants (68%) who are enrolled in a post-secondary institution are full-time, five (23%) are part-time, and two are registered as special students. Of participants studying full-time, eleven are enrolled in university and four in a college diploma program.

Fourteen of the participants (64%) 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, eleven are full-time students. Four 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, six participants report combining studies with a full-time job, and ten of those currently studying have part-time jobs. In addition, four participants currently studying are working at a non-paid internship or placement and one is enrolled in a co-op program. 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 an increasingly difficult job market. Furthermore, that eighteen (81%) of those studying feel fully prepared to enter the job market upon graduation may have something to do with the confidence developed while combining work and school.

III. 2. Accommodations and Assistive Technology

Of the 14 participants currently registered at their Special Needs Office, 8 (57%) are using accommodations, while six (43%) have chosen not to. These figures show a decrease from 2008 and 2009, when 81% of participants reported they were using accommodations, and still lower than the number of participants using accommodations in 2007, 69%.

Of the 22 participants currently studying, the number of participants using assistive technology is 12 (54%). This is similar to the 2008 and 2009 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 currently in each discipline, as compared to the fields of study data in the previous *Transitions* reports. Arts and Social Sciences continue to be the main fields of study for *Transitions* participants.

Field of Study

Field of Study	2004	2005	2006	2007	2008	2009	2010
Social Sciences	36	19	8	5	8	11	6
Education	0*	16	7	7	4	2	3
Arts	16	12	11	12	9	8	4
Business	13	7	9	1	3	3	2
Sciences	6	6	1	2	1	2	2
Computers	5	4	1	0	0	1	0
Hospitality/Tourism	5	5	1	2	0	0	0
Engineering	3	4	3	3	3	2	0
Math	3	1	1	1	0	0	2
Healthcare/Medical	3	7	3	5	2	0	1
Architecture	2	2	0	0	0	0	0
Trade	2	3	0	1	0	0	1
Media	1	1	1	0	0	0	1
Total	95	88	46	39	30	29	22

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

In this final year of reporting, we would like to highlight the number of *Transitions* participants who have degrees or diplomas in the field of education.* In 2010, twelve participants reported having a Bachelor of Education, and two have Master's in Education. Two participants report having been trained to be Education Assistants and one has a diploma in early childhood education. Three report being specialized in LD studies and adaptive technology instruction. We believe it is significant that participants from a group that traditionally struggle with schoolwork have chosen to be teachers. We believe this indicates a high degree of resiliency and drive in our participants.

**When participants are asked to list their educational attainments, it is an open-ended question. Many answer with the number of degrees or diplomas, the name of the school, the year of graduation and the subject of the degree. However, many list simply "Ottawa University, 2004", which makes finding an exact number of Transitions participants with degrees in the Education field somewhat difficult.*

III. 4. Post-Secondary Education Continuers

In 2009, seven participants (24%) were currently studying and had not yet graduated from a post-secondary institution and only 3 (10%) were still in the program they began as pilot students. We reported similar numbers in 2008 and 2009, while 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 2010, four participants (18%) who are currently studying have not yet graduated, and only one is in the program she began as a pilot student.

When asked what progress she has made toward finishing the program she began as a pilot student, the participant wrote: *"The progress that I have made was switching programs four or five years ago but also realizing how much I am reading to do a graduate program."*

Of the three students who are still studying but who changed programs, all three wrote that changing programs was the only reason they are still in school at this time. One participant cited medical reasons for not having graduated, and another is completing one final course.

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 was five participants. In 2010, two participants said changing programs has increased the amount of time necessary to be in school and two participants cited that more time was required due to learning disability. Two of these participants intend to graduate in 2010, one in 2011, and one declined to comment on a possible graduation date.

Identical with the 2008 and 2009 figures, when these PSE Continuers were asked if they

intended to pursue further education after graduation, an amazing three of the four (75%) 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 have the passion to pursue further education in Occupational Therapy as I have a dream to become an Occupational Therapist and help others overcome their own obstacles."* Another writes simply: *"I like being a student."*

III. 5. Further Education Trend: PSE Graduate Continuers

In the *7th Annual Report*, there are 18 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. In 2009, 22 participants (24%) returned to school after graduation.

The *Transitions* figure of 18% 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 *6th Annual Report*, again the most popular reason for returning to school is that further qualifications are required to get the desired job. Last year, 12 participants (54%) returned to school for this reason. This is a slight increase from 43.4% in 2008 and we believed this may have been 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.

In the *7th Annual Report*, the most popular reason for returning to school is that participants wish to become more specialized in their fields. This year, nine participants (50%) reported

this was the reason they returned to school. Eight participants (44%) returned to school because they require further qualifications to obtain the job they want. One participant returned because of a love for education.

Overall, the findings are similar from year to year, though returning to school to become further specialized became the most popular reason this year for the first time. *Transitions* reports tend to show that the majority of former pilot students who return to school do so in order 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, eight participants (44%) returned to school right after graduation, three (18%) returned one year after graduation and seven (38%) returned more than one year after graduation. These figures are very similar to the 2008 and 2009 figures. Furthermore, five participants intend to graduate in 2010, five in 2011, one in 2012, one in 2013, and one (the participant who chose "love of education" as the reason for remaining in school) intends to remain in school indefinitely.

Interestingly, eight (44%) PSE Graduate Continuers intend to return to school after graduation. Last year, 59% intended to return to school, which was closely related to the 2006 and 2007 figures of 50% and 52%. Though lower than previous years, this year's figure remains noteworthy. Participants who intend to return to school often comment that they wish to continually update their skills. One PhD candidate intends to pursue Post Doctoral work upon graduation. Three participants in the field of education wish to return to school to update their skill set, and one intends to do a Masters in Education. These students show a high level of motivation.

Furthermore, of the 10 participants who do not intend to pursue further education after they graduate, three are PhD candidates who do not want to do Post Doctoral work, but begin practicing in their fields. Two others report that they have achieved the highest level of education they desire and four express a desire to begin working full-time.

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 will always be updating my knowledge."*

III. 6. Post-Secondary Education Leavers

Over the last seven years of reporting, we have gathered that *Transitions* participants have a higher than average retention rate than the general population in post-secondary education. We have reported a consistently low level of PSE Leavers in our population. Therefore, the second

Finding of this report is:

Finding #2: Transitions participants have a higher than average retention rate that the general population in post-secondary education.

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. Last year's figure was 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.

This year, there are 5 PSE Leavers, 4.9% of the 102 participants in 2010.

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 - 1
- financial concerns – 1
- cannot decide what career to pursue – 2
- found part-time employment – 0
- found full-time employment – 0
- could not pass all of the required courses to obtain degree/diploma/certificate - 3

The inability to pass required courses remains the most common reason *Transitions* participants do not graduate. This had been reported as a *Transitions* Trend since the 2007 Report. However, due to the small number of PSE Leavers in the study, we cannot report this result as a Finding.

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

Participants were asked if they are planning to return to school in the future. This year only one participant answered in the affirmative. This is different from 2009, when three participants answered "yes" and eight answered "no." The participant who is interested in

returning to school intends to study accounting, but is not sure when she will return to school.

This participant was asked what she feels she needs to do to ensure that she successfully graduates. She wrote that: *"I think I would need help with any reading and note taking as well as the use of a computer."*

Of the three who do not wish to continue their studies, three cite work as the reason for not continuing school. One writes that he does not wish to return to school because *"because I am happy with the job that I am doing now."* Another participant wrote: *"Where I am at with my life doesn't leave me enough time to train and then start a new career."* One participant wrote that it was not financially possible to return to school at this time.

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 had graduated. In 2010, 93 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. Twelve participants have graduated from three programs, and will be referred to as having graduated with a "tertiary" degree/diploma/certificate.

Of the thirty-nine primary graduates, nine graduated with degrees, twenty-six with diplomas and five 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 12 "tertiary" graduates, four 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 who were currently studying were also working. Six of these participants were working full-time and fifteen were working part-time. Four had non-paying internships or placements.

In 2010, 16 of the 22 participants who are currently studying are also working. Ten participants are working part-time and six are working full-time. Four participants have non-paying internships or placements, and one participant has a paid co-op placement.

Similar with 2009, participants who are employed part-time while studying work an average of 13 hours per week and those working full-time while studying work an average of 39 hours per week. Because this year's *Transitions* statistics are again higher than the figures for the general population (See Sandra Franke. "School, work and the school-work combination by young people." p. 48) we feel we are again able to assert that *Transitions* Trend #4 is a Finding for this final report.

Finding #3: Transitions participants combine school and work reasonably well.

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%) lived with their parents or other family members.

This year, 22 participants (22%) lived with their parents or other family members.

This percentage is close 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 22% 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 - 18
- Cultural reasons - 1
- Still dependant upon parents - 1
- Parents are dependent on you - 0
- Preferred living arrangement at this time – 9

In 2010, eighteen participants who live at home (81%) 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 and the 78% in 2009. 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%) lived at home because it is their preferred living arrangement and in 2010 nine (40%) chose this reason. (Note: participants could select more than one answer in 2009/2010).

We have chosen to report *Transitions* Trend #5 from previous reports as *Transitions* Finding #4 this year, comparing our participants with the general population.

Finding #4: A high percentage of Transition participants are living with their parents or other family members.

The remaining 80 participants reported on their current living arrangements as follows: 35 (43%) are living with their spouse/partner, 17 (21%) are living with their spouse/partner and children, 16 (20%) are living alone, 7 (9%) are living with friends, four (5%) are living with children, and one (1%) is living in residence.

III. 10 Financial Issues

Finding #5: Financial concerns are impacting Transitions participants' life decisions.

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%) reported having had student loans, and 53 of 123 (43%) reported still being in debt from student loans.

This year, 68 of 102 participants (66%) report having had student loans and 44 of 102 (43%) report being currently in debt from student loans.

The amount of debt reported is as follows:

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	% of Debt in 2010
Under $5000	15%	17%	7%	8.6%	7 (13.5%)	5 (11%)
$5000 - $10,000	17%	17%	13%	15%	6 (11.5%)	8 (18%)
$10,000 - $15,000	15%	13%	17%	10%	8 (15.4%)	2 (4.5%)
$15,000 - $20,000	19%	17%	5%	2%	3 (5%)	4 (9%)
$20,000 - $25,000	7%	4%	9%	17%	5 (10%)	6 (14%)
$25,000 - $30,000	9%	14%	15%	7%	5 (10%)	4 (9%)
$30,000 - $40,000	10%	7%	11%	13%	11 (21%)	6 (14%)
$40,000 - $50,000	4%	8%	7%	9%	1 (1.9%)	3 (7%)
Over $50,000	4%	4%	15%	17%	6 (11.5%)	5 (11%)
# participants in Debt	100	71	54	46	52*	44

**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 prevented them from enjoying the lifestyle they wanted. In 2010, 33 report that their debt is a hindrance. 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 show how hard they are working toward reducing their debt in the future: *"I am very careful about what I spend my money on. I pay all bills first and if there is left over I use it for extra needed items like eyeglasses etc. I very rarely go out and enjoy myself (i.e. movies, purchase books etc.)"*

One participant comment sums up the difficulty of student debt*: "Pay back rules are changing, but having to pay rent...and then a loan payment equal to rent can really prevent you from having true financial security, unless you increase your income significantly. Think*

about having to make $2000 a month, just to cover loans and rent...now consider the expenses of heat, hydro, food and other basic expenses. Now imagine my life with an extra $600-$800 a month."

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 had graduated and were not studying felt prepared to seek employment. This was higher than the 2008 figure of 69%, and also higher than the 2007 and 2006 figures of 74% and 75%.

In 2010, of the 75 participants who have graduated and are not currently studying, 58 (77%) felt prepared to seek employment. For this reason, we are reporting *Transitions* Trend #7 from previous years as a Finding in our *Final Report*.

Finding #6: The majority of Transitions participants, upon graduation, feel prepared to seek employment.

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 their degree or diploma programs. In particular, two participants who graduated from Bachelor of Education programs this year wrote that *"teacher's college got me prepared to be a real-life teacher by showing me teaching strategies."*

Some students credit working during school with helping to find a job after graduation. *"I felt prepared for work not because of my program, but because I was working as an employment counsellor during the last year of my undergrad."* Along the same lines, another wrote: *"I felt prepared because of part-time work I did in business during school."*

Of the 17 participants who did not feel their post-secondary education prepared them for the job market, many commented that they needed additional skills or experience outside of school in order to find a job. One participant wrote: *"Very few places would hire me without experience. It was hard to find a job."* Another said: *"felt I needed more education for the jobs I wanted, but wasn't ready to jump back into another long program."*

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 no real transition from college to the workforce for the field I chose in computer programming. Not really any support from the college unless you were in the co-op program and able to find employment through that program, and only those who didn't have a modified program and had top grades could apply for co-op."*

Participants are often also struggling with problems not related to school or work like accidents, emotional problems, family issues and so on. Some 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 currently employed. In the *Fifth Annual Report*, 80 of the 93 (86%) *Transitions* participants were employed. In the 6th Annual Report, 99 of the 123 (80%) participants were employed.

In this year's report, 86 of the 102 (84%) 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 from 2007-2010 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).

Finding #7: Transitions participants are earning salaries that are comparable to their peers in the general population and are better than other Ontario Residents 22-29 with learning disabilities.

The following are highlights from our recent employment data. Figures are calculated out of the total number of 102 participants:

- combine work and school: 17 (16%)
- are no longer in school and employed full-time: 51 (50%)
- are no longer in school and employed part-time: 18 (18%)
- are no longer in school and unemployed: 11 (11%)
- currently studying and not working: 5 (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. In 2009, 21 participants combined work and school. This year, 17 participants combine school and paid employment, including one paid co-op placement. This is fewer people than in previous reports because there are fewer participants still in school.

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. In the *Sixth Annual Report*, 61 participants were working full-time. This year, 51 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, 12 in 2008, and 17 in 2009. This year 18 participants work part-time.

Until 2009, 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*. In the *Sixth Annual Report*, the number of unemployed participants increased to 16, but the number has fallen again this year, to 11.

We have again chosen to discuss primarily the salaries of participants who are working full-time 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	0	0
$5000 - $10,000	0	0
$10,000 - $15,000	1	2%
$15,000 - $20,000	2	4%
$20,000 - $25,000	8	15%
$25,000 - $30,000	3	6%
$30,000 - $35,000	9	17%
$35,000 - $40,000	1	2%
$40,000 - $45,000	3	6%
$45,000 - $50,000	5	10%
$50,000 - $60,000	11	21%
Over $60,000	8	15%
Total:	**51**	**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%	2010%
Less than $20,000	21%	26%	13%	17%	7%	15%	6%
$20,000 - $34,999	48.5%	45%	50%	39%	40%	35%	38%
$35,000 - $49,999	23%	23%	27%	17%	30%	21%	18%
$50,000 - $64,999	7.5%	5%	7%	20%	16%	18%	31%**
$65,000 - $89,000	0	0	3%	7%	7%*	8%*	6%**
Total	**100%**	**99%**	**100%**	**100%**	**100%**	**98%**	**99%**

**All five participants earning over $60,000 on the previous chart fall into this category in 2007/2008 and 2009.*
***In 2010, 8 participants earn more than $60,000 annually and 3 participants earn more than $65,000*

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, most markedly up to 37% in 2010.

Though the number of *Transitions* participants working full-time and their salaries have mostly risen year by year, it was only in 2008 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 did not make this same claim again in 2009 because the number of participants earning less than $20,000 annually decreased to 2006 rates, between 13%-15%. However, in 2010, with only 6% earning less than 20, 000 annually, we believe we can again say that *Transitions* participants, in this final year of surveying, are earning salaries equal to those in the general population.

Our benchmark for the success of our participants has been as follows. The median earning for university graduates two years after graduation is $39,000, and $31,000 for college graduates. Furthermore, the national 25th percentile of college graduates earns $24,000 annually, and the national 25th percentile of university graduates earns $31,000 annually (Allen "Class of 2000" p. 31). With only 6% of *Transitions* participants earning significantly less than both the national 25th percentile and the national median earnings for both college and

university graduates, we feel safe to say that *Transitions* participants are earning comparable salaries to their peers in the general population.

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 93% 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*, though it is tempting to write "extraordinarily high rate of employment."

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 2010, only 5 of 102 (5%) participants are PSE Leavers, four of whom are employed full-time and one of whom is 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. In 2009, 8 (72%) were female and three (27%) were male. This year, 3 (60%) are female and two (40%) are male.

Again, despite only 5 of 102 participants being PSE Leavers, it is still useful to look briefly at the salaries of full-time employed *Transitions* PSE Leavers.

There are 4 PSE Leavers who are employed full-time in 2010. Three are female and one is male.

One male working 44 hours per week earns $24,500 per year. Of the three full-time employed females, one works 60 hours per week and earns $41,675 per year. Another works 44 hours per week and earns $20,000 per year. Another works 35 hours per week and earns $30,000 per year. Though these salaries are low considering the number of hours worked, none of these participants consider themselves under-employed.

The four employed participants commented on why they do not feel under-employed:

- *"My work experience qualifies me for this kind of work."*
- *"Because I feel I have been trained for the job I do now."*
- *"I think I make good money."*
- *"Because to be a security guard does not require a lot of training."*

In previous years, there was a *Transitions* Trend that stated: PSE Leavers employed full-time are generally earning salaries that are compared to graduates in the general population. However, due to the very small number of PSE Leavers in the *Transitions* study, we are not turning this trend into a Finding for this report.

IV. 3. PSE Graduate Salary Statistics

Of the 93 graduates in 2010, 65 are currently employed. Fifty-one are employed full-time and 18 are employed part-time. Ten graduates are unemployed. Eighteen graduates returned to school.

In 2010, 51 of 93 (55%) graduated participants are employed full-time. This is less than the 2009 figure of 56 of 70 (80%) which was 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%.

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	13	14%	4	4%	1	1%	18	19%
Employed full-time	26	28%	21	22%	0	0	47	50%
Employed part-time	6	6%	10	11%	2	2%	18	19%
Unemployed	5	5%	3	3%	2	2%	10	10%
Total	50	51%	38	39%	6	5%	93	98%

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.

In 2010, there are 26 participants with university degrees employed full-time and 21 participants with diplomas employed full-time. There are no participants with certificates employed full-time this year.

Annual Salaries of Full-time PSE Graduate Non-Continuers

Annual Salary Range full-time	University Grads	%	Diploma	%
Less than $5000	0	0	0	0
$5000 - $10,000	0	0	0	0
$10,000 - $15,000	1	4%	0	0
$15,000 - $20,000	0	0	2	9%
$20,000 - $25,000	3	11%	3	15%
$25,000 - $30,000	0	0	3	15%
$30,000 - $35,000	4	15%	4	19%
$35,000 - $40,000	1	4%	0	0
$40,000 - $45,000	1	4%	2	9%
$45,000 - $50,000	2	8%	2	9%
$50,000 - $60,000	8	31%	3	15%
Over $60,000	6	23%	2	9%
Total full-time:	26	100%	21	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 (Graduating in Canada:

Profile, Labour Market Outcomes and Student Debt of the Class of 2005, Justin Bayard and Edith Greenlee, 2009, 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, 42% 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 Grads	%
Less than $5000	0	0
$5000 - $10,000	0	0
$10,000 - $15,000	1	4%
$15,000 - $20,000	0	0
$20,000 - $25,000	3	11%
$25,000 - $30,000	0	0
$30,000 - $35,000	4	15%
$35,000 - $40,000	1	4%
$40,000 - $45,000	1	4%
$45,000 - $50,000	2	8%
$50,000 - $60,000	8	31%
Over $60,000	6	23%
Total full-time:	26	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. In 2009, the highest percentage of university graduates was 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 a significant decrease in the number of university graduates who can be said to be extremely under-employed. This year, only 4% of university graduates working full-time earn less than $20,000 annually.

In 2009, the number of university graduates employed full-time and earning less than $20,000 annually was 12%. In 2008 that number was only 4%, in 2007 it was 12%, and in 2006 it was 15%. It is difficult to report a pattern in these numbers.

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. In 2009, fourteen participants earned salaries higher than$39,000 annually. This year, seventeen 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, the same figure as 2009. These eight participants are earning salaries higher than the median earnings of graduates in the general population, $45,000. In addition, six participants are now earning above $60,000 annually, which is an increase of four people since 2009.

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. 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:

- 10 years – One person, $59,000
- 7.5 years – One person, $20,000
- 6.5 years – One person, $30,000

**The figure of $39,000 annually was from Allen, "Class of 2000" released in 2004. Last year, the follow up of this study by Justin Bayard and Edith Greenlee found that the median annual salary of university graduates in 2006 was $45,000. We are using the figure $39,000 for comparison purposes between Transitions reports.*

- 5 years – One person, $50,000
- 4.5 years – Two people, $56,000, $11,000
- 4 years – Four people, $60,000, $59,000, $30,000, $24,000
- 3 years – Three people, $60,000, $53,000, $50,000
- 2.5 years – One person, $55,000
- 2 years – Three people, $64,229, $46,000, 52,000,
- 1.5 years – Six people, $170,000, $70,000, $48,000, $47,000, $32,000, $30,000
- 5 months – Three people, $62,000, $20,000, $35,000,

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 under-employment *as being employed at a level lower than your education and work experience warrants.* Eight university graduates working full-time consider themselves under-employed. One participant who has been with his current employer for 4 years writes: *"My career is not progressing at all nor will it in this place of work."*

Four participants who feels under-employed have degrees in Education. One comments: *"It is progressing, but slowly. Unfortunately many people are in my position. Full-time teaching jobs are hard to get in Ontario."* Another participant with a bachelor of Education writes: *"I am working at an after school care institution, doing some planning and organization, but mostly playing with kids making sure they are safe. But I have two degrees and one in education. I think I am a little under-employed."*

Twenty-four 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: *"all my duties at work are right in line with my schooling and skills."*

One participant who earns $62,000 a year and does not consider himself under-employed, writes: *"My salary is what a new graduate engineer would be. My job duties are quite challenging."* An employed teacher who makes $46,000 annually, writes: *"I am getting paid the salary that I should be getting for my level of qualifications. These standards are set by the Ontario College of Teachers."*

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. 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 were earning the average annual salary for the general population or above. This year, 61% 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, 24% 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 more than the figures from 2007-2009, which were 22%, 22% and 14%.

However, the majority of participants with college diplomas, 13 (61%) 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. However, this figure is less than 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	%
Less than $5000	0	0
$5000 - $10,000	0	0
$10,000 - $15,000	0	0
$15,000 - $20,000	2	9%
$20,000 - $25,000	3	15%
$25,000 - $30,000	3	15%
$30,000 - $35,000	4	19%
$35,000 - $40,000	0	0
$40,000 - $45,000	2	9%
$45,000 - $50,000	2	9%
$50,000 - $60,000	3	15%
Over $60,000	2	9%
Total full-time:	21	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 earns $24,000 annually. 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. In 2009, only 5 were earning in that salary range. This year, only 5 are earning in that salary range. This indicates that under-employment has gone down significantly in this group, something we also observed beginning in the *Fourth Annual Report*.

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.

**The general population figures reported here are from Allen, "Class of 2000" released in 2004. Last year, the follow up of this study by Justin Bayard and Edith Greenlee found that the median annual salary of college graduates in 2005 was $35,000, and this follow-up report did not detail the earnings of the 25th percentile.*

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.

- 10 years – One person, $45,000
- 8 years – Four people, $60,000, $57,000, $28,000,
- 7 years – One person, $32,000
- 5 years – One person, $84,000
- 4 years – Two people, $50,000, $23,000
- 3.5 years – One person – $55,000
- 3 years – Four people, $32,000, $32,000, $23,000, $16,000
- 2– Two people, $40,000, $24,000
- 1 year – One person, $30,000
- 9 months- One person - $15,000
- 5 months – Two people - $45,000 $40,000
- 2 months – One person - $27,000

It is not clear from the data collected from College graduates if having kept a job longer has led to higher salaries, though three of the highest salaries in this group are held by individuals who have had their jobs for over 5 years. That being said, two participants who have held their jobs for only 5 months are earning very reasonable salaries for this group.

Again, we felt it important to consider if our college graduates feel themselves to be under-employed. Twelve participants with diplomas currently working full-time consider themselves under-employed. One participant who earns $30,000 annually commented: *"RPN's get underpaid for the responsibilities that we have. This not a problem with where I work but a problem with the government."* Another participant who has been working with the same employer for 8 years and earns $60,000 annually writes: *"I am bored, under-challenged and don't feel my work makes a difference."*

One participant with a diploma, commented that it was due to living in a rural community that she feels under-employed: *"Opportunities are limited in our rural community. Because of debt load I had to take the first employment offer I got."*

Nineteen 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 2.5 years and is earning $43,000 annually writes: *"I am making enough to pay my mortgage and not live cheque to cheque. I am able to purchase what is required."*

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, in this final year of reporting, we are turning a *Transitions* Trend into a Finding.

Finding #8: Field of study likely influences low salaries of Transitions participants.

Similar to the previous *Annual Reports*, a high number of *Transitions* participants are employed in their field of study. All 86 participants who are currently employed were asked to answer the question: Does your current employment build upon your post-secondary program? This year, 64 (74%) of the 86 employed participants indicated that they were working in a field related to their post-secondary education, while 22 (26%) 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, 85.0% 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

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 were indications that gender could end up being significant when trying to understand why some of our participants are under-employed, however, we have decided not to report any gender differences regarding salary or under-employment as Findings in this final report.

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 (Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005, Justin Bayard and Edith Greenlee, 2009, p.17).

Forty-one PSE Graduate Non-Continuers, or 63% are female. Twenty-eight 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%) were female and nine (36%) were male. In 2009, 19 (70%) university graduates working full-time were female and 8 (30%) were male. This year, 16 (61%) and 10 (38%) were 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. In 2009, the participant working full-time with a college certificate was female. There were 15 (53%) males working full-time with college diplomas, and 13 (46%) females in 2009. This year, 12 (57%) participants working full-time with college diplomas are female and 9 (43%) are male. There are no participants with college certificates working full-time this year.

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 under-employed. 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	Degree	%	Diploma	%	Total	%
$5000 - $10,000	0	0	0	0	0	0
$10,000 - $15,000	1	3%	0	0	1	3%
$15,000 - $20,000	0	0	1	3%	1	3%
$20,000 - $25,000	2	7%	3	11%	5	18%
$25,000 - $30,000	0	0	2	7%	2	7%
$30,000 - $35,000	4	14%	2	7%	6	21%
$35,000 - $40,000	1	3%	0	0	1	4%
$40,000 - $45,000	0	0	0	0	0	0
$45,000 - $50,000	3	11%	1	3%	4	14%
$50,000 - $60,000	5	18%	2	7%	7	25%
Over $60,000	0	0	1	3%	1	3%
Total full-time:	16	56%	12	41%	28	98%

Male Graduates Salaries full-time

Male Annual Salary Range	Degree	%	Diploma	%	Total	%
Under $5000	0	0	0	0	0	0
$5,000 - $10,000	0	0	0	0	0	0
$10,000 - $15,000	0	0	0	0	0	0
$15,000 - $20,000	0	0	1	5%	1	5%
$20,000 - $25,000	1	5%	0	0	1	5%
$25,000 - $30,000	0	0	1	5%	1	5%
$30,000 - $35,000	0	0	2	11%	2	11%
$35,000 - $40,000	0	0	0	0	0	0
$40,000 - $45,000	0	0	2	10%	2	10%
$45,000 - $50,000	0	0	1	5%	1	5%
$50,000 - $60,000	3	16%	1	5%	4	14%
Over $60,000	6	31%	1	5%	7	25%
Total full-time:	10	52%	9	46%	19	98%

Gender and University Graduates

The median annual salary for a female university graduate in the general population remains $37,000 for a full-time worker, whereas the median salary for a full-time employed male university graduate is $42,000 annually.

We can see that eight (29%) 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 2010 nine participants (47%) earn above the general population median salary for men of $42,000 annually.

Thus, we have no reason to conclude from this pattern of surveying that there is a 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 $32,568 annually, whereas a male college graduate's full-time salary is $35,667 (Employment Profile 2006-2007, p.22).

We can see that four (14%) females with college diplomas in the *Transitions* study 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. This is similar to the 2009 figure of two female college graduates significantly under-employed.

Two (10%) male college graduates earn less than the average median salary for men, and this is a significant decrease from the 2006 figure of 24% and higher than the 2007 figure of 11%. This is similar to the 2009 figure of one college graduate who was significantly under-employed.

It is also worth noting that five men and four women earn above the college male average yearly earnings of $35,667 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.

Gender and Unemployment

PSE Graduate Non-Continuer Unemployment by Gender

Unemployment	Uni	%	Dip	%	Cert	%	Total	%
Female	3	5%	2	3%	0	0	5	8%
Male	2	3%	1	2%	2	3%	5	8%
Total	5	8%	3	5%	2	3%	10	16%

**The unemployment rate on this chart is taken from all PSE Graduate Non-Continuers including those who work part-time (65). Overall unemployment rate for PSE Graduate Non-Continuers is 16% while overall unemployment rate for all participants is 11%.*

The overall unemployment rate for PSE Graduate Non-Continuers had increased slightly in 2008 to a low rate of 14%. In 2009 that rate also increased slightly to 18%. This year, the figure has fallen to 16%.

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. In 2009, 8% of female PSE Graduate Non-Continuers and 10% of male PSE Graduate Non-Continuers were unemployed. This year, 8% of female and 8% of male PSE Graduate Non-Continuers are 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.

In previous years, more male PSE Graduate Non-Continuers were unemployed than females, but in 2010 the figures have evened out. Again in this report, due to the small sample size, we cannot extrapolate a definitive result for whether or not the previous male unemployment rate, especially for those with college certificates, indicated that males were having a more difficult transition to the workplace. It is again difficult to find a gender pattern in the *Transitions* unemployment data.

IV. 5. Unemployment and *Transitions* Participants

***Transitions* Unemployment Rate**

Unemployment	Uni	%	Dip	%	Cert	%	Total	%
Female	3	3%	2	2%	0	0	5	5%
Male	2	2%	1	1%	2	2%	5	5%
(Non graduate)							1*	1%
Total	5	5%	3	3%	2	2%	11	11%

** One male*

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 was again low, at 8%.

In the *6th Annual Report* there was a higher unemployment rate than in previous years, 12.8%, and we noted that that number reflected the overall Canadian unemployment rate for that recession year, which was 8.6% (as of November 6, 2009: http://www.statcan.gc.ca/subjects-sujets/labour-travail/lfs-epa/lfs-epa-eng.htm)

This year, 11% is still a high figure, with the Canadian unemployment rate being in 2010 being 7.7%. (http://www.statcan.gc.ca/subjects-sujets/labour-travail/lfs-epa/lfs-epa-eng.htm) This year, because 11% is still higher than the Canadian unemployment rate, we can again say that *Transitions* participants have a slightly higher unemployment rate than the general population. However, due to the small number of participants who are unemployed, we are not reporting this as a Finding in this final report.

Unlike previous reports in which unemployment figures were highest in those who earned college diplomas/certificates, this year, unemployment is highest among university graduates.

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 11% 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. Of the eleven unemployed participants,

six responded in the affirmative. Three cited mental health reasons, two physical health reasons, and one had just been laid off due to lack of work.

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 – 3
- Networking – 3
- Internet Job Websites - 2
- Resume review – 2
- Information sessions/workshops on employment - 1
- Campus Career center - 0

IV. 6. Life Goals and Employment

For the *Sixth Annual Survey*, we asked the employed PSE Graduate Non-Continuers (full-time and part-time) about their career and life goals and how they are making progress in these areas. We asked these questions again this year. 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	21
New career	5
Same career, different employer	1
Not sure	6
Permanent position	11
Promotion	4
More stable job	11
Same company, different city	1
More money	4
Same company, different job	4
Change to self-employed	4
Change to part-time	1
Retired	1

As this chart shows, participants are actively planning for their futures, and quite realistic in their plans. Many spoke about the desire to have permanent employment. One participant writes*: "Hopefully no more term employment but have a permanent job with the Government."*

Many of our participants are in Education, and many wrote about finding full-time teaching work in Ontario. One wrote: *"Hopefully I will be teaching Grade 7 or 8 history in my own class, not supply teaching."*

As a follow-up to this question, we asked participants "Have these career goals changed in the past year?" Twelve participants who are currently employed responded that their goals have changed and many wrote about taking additional courses or looking for a promotion. Twenty-one responded that their goals had not changed. Twenty-one responded that they had achieved a career success recently. Nine did not respond. The following is a sample of their various qualitative responses:

"Yes, now I plan to do more specialized courses in Obstetrical nursing as opposed to ER."

"Yes, I have taken on too much at work. I am Primary Division Leader, NTIP mentor to another first year teacher, I have a university co-op student, IEP lead team, Emergency Contact person and do an after school program."

"There was a time when I wanted to start my own business but now I'm with the Government and would like to stay with the Government."

"Not really – I am still in the field of ECE but not where I want to be and not getting paid what I want to be paid."

"My career goal has always been to work in the accounting field and I have been reaching this goal since I left school."

"I just received my permanent status; I have reached my goals for the time being."

We also asked PSE Graduate Non-Continuer participants if their current job would help them reach their career aspirations. Fifty-two participants currently employed said it would help, while thirteen 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: *"There are opportunities within the company to grow"*

Another wrote: *"My current employer appreciates and respects my contributions."*

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: *"There is a possibility the company might expand, giving me a longer job in the future, but it is not clear right now if that will happen."*

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 wrote that they are simply working jobs to pay the bills.

We also asked participants if they are satisfied with their jobs. Fifty of the 65 (75%) PSE Graduate Non-Continuers responded they are satisfied. Many commented that they loved their jobs and the people they work with. Some comments are below:

"My work is my passion. I love to create websites and teach people how to do things more effectively."

"My job is a challenging job which offers continual learning."

" I enjoy that I am able ot help kids and their families. I like that the struggles I have faced around my LDs can be 'useful' because I can pass on what I have learned."

"I have chosen to do business from home so that I can stay home with my children, make my own hours, and follow a schedule that works for me."

V. Trends Related to Learing Disability

V. 1. Self-Advocacy and Resiliency

Throughout the *Transitions* Study, we have 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 our population as a whole is quite resilient. This has remained true each year.

Life Goals

Finding #9: Transitions participants place great emphasis on educational and career goals, while social goals remain relatively low.

It has been consistently noted in each *Transitions* report that our participants are incredibly goal oriented about education and their careers. However, each year we 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. Since 2006, 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 - 44
- Get married - 38
- Have a steady relationship - 26
- Start a family - 44
- Travel - 49
- Finish school - 19
- Pursue further education - 25
- Be debt free - 47

- 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 hoping to "save more money". Others also cited spending more time with their children or having larger families.

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 by nature. In 2010, 53 of 102 (52%) responded that they were social by nature. In 2009, 71 of 123 (57%) responded they were social by nature. It appears that the figure for 2009 is a slight change in trend, for in all the years prior, about 54% consistently said they were social by nature. The 2010 figure is only slightly smaller, likely due to a smaller sample size. *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: 14
- With others: 19
- Both equally: 61
- Don't have free time: 8

Fourteen participants (14%) said they prefer to spend their time alone, nineteen participants (19%) prefer to spend time with others, and the majority, 61 (60%), prefer the answer "both equally". Eight participants (8%) responded that they have no free time. *Transitions* participants seem quite balanced in their social/solitary preferences. Similar to results in 2009, this year's "both equally" percentage of 60% is 10% higher than the same answers from 2006-2008. Overall, this population seems to strike a good social balance.

Volunteer Work

Finding #10: A high number of Transitions participants engage in volunteer work.

We have consistently noticed that a high number of our participants engage in volunteer work, despite their incredibly busy schedules. Because this has been consistent for each year of reporting, we have designated it Finding #15.

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%) did volunteer work.

In 2010, 35 of 102 participants (34%) do volunteer work. This is similar to the 2006-2009 figures, and remains an increase from 23% in 2005.

The 2010 volunteer statistics are as follows:

- 0-5 hours/month - 15
- 6-10 hours/month - 8
- 11-15 hours/month - 8
- 16-20 hours/month - 1
- 21-25 hours/month - 0
- 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. Twenty-eight participants who volunteer do so for the opportunity to help others. Twenty-two do so for the sense of satisfaction. Twenty-one volunteer in order to gain work experience and sixteen selected "opportunity to meet people" as their reason for volunteering. Six 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, "Be the change I want to see."

Exercise

Finding #11: A high number of Transitions participants engage in physical activity

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%) did a physical activity on a regular basis. In 2010, 59 of 102 participants (58%) do a physical activity regularly. Though this year's figure is slightly lower than those in other reports, this still 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 from 2007-1009 that individual sports were the most popular, followed by recreational activities. The responses for 2010 are as follows:

- Group sports: 13
- Individual sports: 35
- Recreational: 23
- Outdoor activities: 19
- Other: 14

The most popular form of physical exercise was individual sports, with 35 of the 59 (59%) participants engaging regularly in individual sports. Twenty-three (39%) participants enjoy recreational activities, nineteen (32%) do outdoor activities and 13 (22%) like group sports.

It is interesting to note that in 2010, the number of participants who wrote in the "other" category that they enjoyed exercising with Wii Fit was three, and two wrote that they exercise by playing with their children, a testament to the number of *Transitions* participants with young families.

We also asked participants "How often do you do your physical activity in a week?" The 2010 results are below and do not differ greatly from previous years.

- More than 6 times: 5
- 5-6 times a week: 9
- 3-4 times a week: 23
- 1-2 times a week: 22

Relationship satisfaction

Finding #12: Transitions participants appear to be resilient in social relationships.

In each year of *Transitions* reporting, we have asked questions 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. Each year, we noted a trend of resiliency with regard to social relationships, and are reporting it now as Finding #17.

In each year, participants were forced to select from six options, identical to options available in each previous survey. With regard to friendships, fully 64% of participants, reported that they are satisfied or very satisfied:

- Very Satisfied - 13
- Satisfied - 52
- Somewhat Satisfied - 28
- Not satisfied - 6
- Very Dissatisfied - 2
- No friends – 1

The figure of 64% of participants reporting being very satisfied or satisfied with their friendships is similar to the 2009 figure of 65%, which was 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%. It would be interesting to see when 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% were 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.'

In 2010, 58% of participants are very satisfied or satisfied with their relationship and 31% report having no relationship at this time. Very few participants seem to be very unsatisfied with their relationships.

- Very Satisfied - 34
- Satisfied - 25
- Somewhat Satisfied - 7
- Not satisfied - 2
- Very Dissatisfied - 1
- No relationships at this time - 32

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. From 2006-2009, 74-76% of participants were either very satisfied or satisfied with their family relationships. In 2010, 75% are either satisfied or very satisfied with their family relationships.

- Very Satisfied - 31
- Satisfied - 46

- Somewhat Satisfied - 16
- Not satisfied - 7
- Very Dissatisfied - 2
- No family relationships at this time - 0

Social Challenges Related to Learning Disability

For the past five years, we have 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 presented no challenge to their social life. In 2007, fifty-six participants said their social life was challenged by their learning disability, but sixty-three (53%) participants said they did 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 did not. In 2009, 50 participants (41%) said their learning disability was a challenge in their social life, while seventy-three participants (59%) said their learning disability did not present any social challenges.

In 2010, fifty participants (49%) said their learning disability was a challenge in their social life, while 52 (51%) said it was not. These figures have not changed significantly over time, though the 2010 data shows an increase in those who find their learning disability presents social challenges.

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	2010
Shyness: 15	Shyness: 20	Quick self-expression in groups: 15	Conversation Problems: 11 (Interrupting, not remembering)	Shyness: 14
Self-consciousness: 12	Speech/self-expression trouble: 12	Self-conscious: 7	Self-conscious: 6	Trouble in large groups: 10
Memory problems (words, faces, etc.): 9	Trouble in large groups: 7	Shyness: 4	Shyness: 5	Weak verbal skills: 9
Problems with self -expression: 6	Making Friends: 4	Low self-esteem: 4	Reading/writing in public: 5	Reading/writing in public: 6
Social anxiety: 5	Anxiety: 3	Not witty: 2	Looking stupid: 3	Self-conscious: 3
Distracted: 4	Memory: 2	Anxiety: 2	Anxiety: 2	Anxiety: 3
Others speak too fast: 3	Reading: 1	Reading/writing in public: 3	No Social skills: 2	Difficulty reading body language: 2
Over analyzing everything: 2	Time management: 1	Meeting new people: 2	Eye contact: 2	Don't know when to stop talking: 1
Loner: 2	Difficulty reading body language: 1	Difficulty reading body language: 1	Not assertive: 1	Focusing for long periods of time: 1
Reading in public (menus, signs): 2		No time for social life: 1	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. This showed up again with a similar frequency in the 2010 responses. In 2009 we noticed a decrease in the number of participants who referred to "shyness" though in 2010, this was again the most popular answer as it was in 2006 and 2007. Overall, participant

responses may show some of the pressures all young people experience in their social lives.

In reference to large-group conversations, one participant writes: *"I have trouble relating to others, also feel that I'm hiding a big secret sometimes"* Along the same lines, another participant wrote: *"I have trouble 'reading' people. Sometimes I don't interpret body language/ facial expressions and sarcasm is lost on me sometimes. I sometimes get lost in conversations and I'm unsure who/what people are talking about."*

In 2010 it was noticeable in these answers how many participants felt they were taking steps in the right direction. One participant wrote: *"Sometimes I do get nervous about a social situations. I find the more I get out and socialize the less nervous I feel that's why I enjoy working with the public face to face rather then over the phone. I like to think of a experience where I was success."* Another writes that she experiences social anxiety quite frequently, but *"I'm in therapy to overcome these things."* Another writes: *"I am shy in new social situations, however, because I am out of my comfort zone I really try to work on this skill as it is important to maintain new social networks."*

One participant commented on a challenge that is difficult to articulate. *"Perhaps one challenge is being an authentic person. I hide behind my LD and smudge the truth about it. Essentially, there is some phobia or social stigma that exists. I think that this has impacted my personal values, causing me to not always be forthcoming"*

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 seventy -six participants (75%), responded in the negative, twenty-six (25%) participants did feel their learning disability has given them an advantage in social situations. These 2010 figures vary only slightly from the 2009-2006 figures, though there was a slight increase in those who report their learning disability is advantageous, from 23% in 2009 to 25% in 2010. Participants commented extensively about the advantages, and the lists below are a compilation of the most common responses in the past five years.

Social Advantages

2006	2007	2008	2009	2010
Less judgmental/ more empathetic: 9	Less judgmental/ more empathetic: 6	New perspective: 4	Think outside the box: 3	Great communicator: 6
Abstract/creative thinking: 5	Not shy: 4	Empathetic/intuitive: 3	Great speaker: 3	Don't worry about making mistakes: 4
Forced to be confident: 4	Quick thinking: 3	Good communicator: 3	Intuitive: 2	Empathetic: 3
Better memory/ more observant: 3	Know own strengths/ weaknesses: 2	Relate with people: 2	Sensitive: 2	Compassionate: 3
People skills: 3	Express feelings well: 2	Talkative/outgoing: 2	Good listening skills: 2	Energetic: 2
Assertive: 2	Spontaneous: 2	Sense of humour: 1	Social skills: 2	Patient: 1
Increased intelligence: 2	Sense of humour: 1	Know strengths /weaknesses: 1	Funny/high energy: 2	Think outside the box: 1
Sense of humour: 2	Socially intelligent: 1	Visually perceptive: 1	Multi-tasking: 1	Outgoing: 1
	Quick speaking: 1		Interest in everything: 1	Good outside of comfort zone: 1
	Deal well with stress: 1		Good memory: 1	Not sure: 2
	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: *"Because my LD is in the written language side of my brain (or something like that) my verbal side has become much stronger to make up the difference. so I've got very good verbal skills and I've always felt very comfortable with crowds. I also believe that the fact that I must have been informed of my LD at a young age (I can't actually remember when I didn't know I had an LD) that it hasn't affected my feelings of self worth because my parents never let it."*

Similar to 2008 and 2009 answers, participants wrote about how their LD has helped them become more compassionate and empathetic. *"I have more compassion. I have more sympathy for others because having an invisible disability is one of the tougher things to have - people judge you and sometimes jump to conclusions that your intelligence is lower."* Another participant wrote: *"Can be more compassionate, and accepting compared to other people."*

Finally, one participant wrote about success in work meetings as a result of his learning disability*: "I have no fear of repercussion preventing me from stating my honest thoughts like the rest some co-committee members. I know how to get conversations started and make awkward discussions happen from addressing root cause issues. Members often look to me for candid feedback, which may be a happy result of impulsiveness."*

V. 3. LD-Related Challenges at Work

Since 2006, we have 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 also responded that they faced challenges, while 56 reported they do not. In 2007, 21 employed participants responded that they faced challenges at work because of their learning disability, and 31 responded in the negative. In 2009, 50 participants said they face challenges related to their learning disability at work, and 49 said that they did not.

This year, 33 of the 86 (38%) currently employed participants said they faced LD related challenges at work.

Of those who felt they had learning disability related challenges at work, the biggest challenges listed were:

Common Challenges at work

2006	2007	2008	2009	2010
Memory/ concentration: 11	Writing: 13	Spelling/grammar: 4	Writing: 11	Memory: 5
Spelling errors: 7	Spelling errors: 11	Reading: 3	Spelling: 9	Spelling: 5
Phonics: 5	Reading: 6	Writing: 3	Memory: 8	Focus: 5
Editing: 5	Time management: 5	Need more time: 3	Time management: 4	Writing: 5
Co-workers who do not understand: 4	Math/numbers: 4	Self-expression: 2	Attention span in meetings: 4	Organization: 4
Time management: 3	Memory: 3	Time management: 2	Learning new things fast: 2	Number sense: 4
Hiding learning disability: 2	Focus: 1	Organization: 2	Reading: 2	Time management: 5
Reading: 2	Confidence: 1	Confidence: 1	Need more time: 2	Multi-tasking: 2
Paperwork: 1	Self expression: 1	Fatigue: 1	Listening: 2	Communication: 1
Not bilingual: 1		Math: 1	Overwhelmed: 1	Hyperfocus: 1
		Details: 1	Need visual aids: 1	Anxiety: 1
		Memory: 1	Focus: 1	Reading: 2
			Don't ask for challenging work: 1	Don't challenge status quo: 1
			Over stimulation: 1	Background noise: 1

Disclosure at work

Finding #13: Transitions participants disclose their learning disability at work only when necessary for the job. Significantly more women working full-time disclose their learning disability at work than men.

One of the most important findings of the *Transitions* reports is that our participants disclose their learning disability at work only when necessary for the job. This has been a consistent trend for the past seven years and this year the number of participants who have disclosed is 55%.

All 86 currently employed participants were asked about disclosure of their learning disability at work. Forty-seven participants (55%) who are currently employed responded they have disclosed their learning disability at work. This is the highest number in the *Transitions* study so far. In 2009, 48% had disclosed, and in 2008, 50% had. In 2006 and 2007 the figure was also 48%. 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 2008/2009, 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 year's figure is the same as 2009. This indicates a positive transition from school to work for these participants.

Thirty-nine currently employed participants (45%) have not disclosed. The most common reason for non-disclosure was, that it was unnecessary. Thirty-two of the 39 (82%) who have not disclosed have not done so for this reason. This is similar to the 2009 figure of 83%, though still less than the 86% reported in 2008, but higher than the 2006 response of 78%.

Other responses included three participants who wrote that they don't want their coworkers to know they have an LD. One participant wrote that she *"doesn't want to be treated different."* One participant wrote only one word: *"embarrassed."*

Two comments in particular deserve attention:

- *"I don't want to go into it with them. I told a previous employer and got a negative response. I just try my best to work around it."*
- *"Stigma, I guess."*

The participant who wrote about a previous negative response from an employer is the same one who reported in this manner in 2009.

This year, we asked participants who have not disclosed if they plan to. Eight of the 39 participants who did not disclose plan to in the near future. This is more than the four who said they would do so in 2009 and the same number who reported this intent 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.

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 2010, 12 men have disclosed their learning disability at work verses 35 women.

Accommodations at Work

Finding #14: Few participants who are currently employed use accommodations and/or assistive technology at work.

Transitions participants for the past seven years have been using accommodations and/or assistive technology at work, but less than we would have expected based on usage while in school. The most common reason for not using accommodations or assistive technology is that they are not necessary for the job. Most participants who have asked for either have received it from their employers. This shows our population to be an active group, able to ask for what they want in order to succeed.

Of the 86 participants who are currently employed, only 17 (20%) use accommodations at work. This is the same as the 2009 figure, but lower than the 2008 figure of 25%, which was the highest accommodation use recorded.

The 2010 figure of 20% is similar to the figures from 2005/2006/2007/2009 where only 18%/21%/22%/20% used accommodations.

The most common accommodations used at work are as follows:

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

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 were willing to provide them or they 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 that the process was somewhat difficult due to the type of accommodation provided, but the subtext of this comment shows the willingness of the employer to help: *"It was difficult at first to find the right system. I think my supervisors hoped that my accommodation needs could be met though adaptive technology. Unfortunately these programs don't seem to work very well for me, so I need a human helper. Once we found a system of using an editor that was flexible enough to meet both our needs things have been great. My current supervisors comments that this way of writing reports is "not onerous."*

One participant had funding problems with regard to accommodations, but again the subtext is that the employer was more than willing to help provide accommodations: *"They [employers] tried their best through ODSP which I wasn't on but could access their employment supports, but because I was on Ontario works they could not help me, and I didn't make enough money to pay rent so I couldn't come off it, so didn't qualify for ODSP help."*

Still, the majority of participants do not use accommodations in the workplace. Sixty-nine currently employed participants are not using accommodations. Only three of these participants have requested accommodations and are not using them. Of these three, one wrote that their request resulted in a "negative reaction," while the other two wrote that no accommodations were available.

The majority (57 participants) who are not using accommodations are not doing so because none are needed. Three wrote that they did not want to be treated differently by requesting accommodations, one has not discussed it, and another is self-employed. One particularly negative reaction was *"no point, nothing ever comes from it."*

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 used assistive technology at work. In 2010, 22 of the 86 (26%) currently employed participants use assistive technology at work. The 2008-2010 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.

- Concept Mapping: 5
- Text to Audio: 7

- Digital Organizer: 6
- Digital Dictionary: 15
- Speech to Text: 6
- Other: SMART board, Franklen, Editing program – One Note

Of those who are using assistive technology in the workplace, only five requested assistive technology from their employer (up one person from 2009/2008/2007), while 17 installed it themselves or brought their own from home (a decrease of 3 participants doing so in 2009). 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 64 currently employed participants who do not use assistive technology at work, 43 do not use it because it is not necessary for their current employment. Other responses were as follows:

- I don't want to – 1
- Chose not to - 1
- Can't afford it – 3
- No one knows I have an LD – 1
- I want to be treated equally - 1
- Not sure what it is – 1
- I don't feel comfortable asking - 1
- Not provided - 2

Relationship with Co-workers

Finding #15: Transitions participants have good relationships with their co-workers.

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. In 2009, 93 of the 99 (94%) currently employed participants said their working relationships were comfortable. In 2010, 82

of 86 (95%) currently employed participants have a comfortable working relationship with their colleagues.

As in previous reports, we asked participants if they interact with their co-workers outside of the workplace. Fifty-one of the 86 (59%) employed participants responded they do spend time with their coworkers outside of work.

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”(35), closely followed by “1 to 3 times a week” (15), and one responded “more than three times a week.” We believe these figures again corroborate the Trend from previous years and allow us to turn this Trend into a Finding.

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%. In 2010, 64 of the 86 employed participants reported job satisfaction, at a rate of 74%.

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

"My work is my passion. I love to create websites and teach people how to do things more efficiently.”

"I enjoy that I am able to help kids and there families. I like that the struggles I have faced around my LDs can be 'useful' because I can pass on what I have learned to others.”

"Good pay. Excellent (and positive) work environment. Strong sense of satisfaction from my work (I can see where I'm making a difference). Strong sense that I am appreciated for my work (supervisors regularly acknowledge how much they value my contributions). Great job!!!”

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

"There is no future in it. Just a job to pay some bills.”

“After 3 years of working up, I have gone as high as I can go and feel that I can no longer learn anything new from this job. I am currently looking for employment that offers a new learning curve for me in order to build my experience and resume.”

“The physical demands are harder due to aging and I feel I am not being paid in relation to education and experience.”

Despite comments like these, we are prepared to turn a *Transitions* Trend into a Finding for this final year of reporting.

Finding #16: An overwhelming percentage of Transitions participants experience job satisfaction.

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 felt they were achieving a healthy work/life balance.

In 2010, 64 of the 86 (74%) employed participants feel they strike a good balance between work and life.

Participants were asked to comment about this balance. Those who responded positively, many wrote that they truly enjoy their jobs, though in 2010 (as in 2009) a high number of participants added that there is always room for improvement. Some positive comments are as follows:

"For now - but ask me in six months because I just started. Working and going to school will be a challenge. I start my M.Ed. program this summer."

"I go to the gym, have time with my kids and spouse, have friends and visit family. I also have time to coach in the school."

"I am in a great place in my life both emotionally and academically and financially."

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:

"I work way to many jobs- 3 part time jobs there is not much of a balance for my life that is for sure."

"Working too many hours for little or no pay as I only make $20.00 per hour, and work 50 hours on average a week. Which works out to over 200 hours a month, and leaves little time for family, friends, or life in general. Plus the government gets majority of my income in taxes, and feel like I am wasting my time working at a job I don't really like to keep the wolf away from the door."

"Money concerns don't allow me to have much of an outside life other than being at home with my family."

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 2010, 18 participants answered they felt there were other ways their learning disability was affecting their lives (37 in 2009, 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 2010 we have chosen to do the same and we have included some mixed responses as follows:

"As time goes on my LD has started to affect my capacity to remember things even more, and does put a strain on my relationships with my family & friends. They think at times I am just being lazy, or that I just don't care although this could be further from the truth. Some times I care to much, and it bothers me when I mess up by forgetting something important that needed to be done but wasn't because of this memory problem."

"It affects every aspect of my life: meeting new people, going to a new place, etc. These things are becoming harder as I get older. It's like my coping mechanisms are becoming less and less effective. Even something as simple as grocery shopping is difficult. I forget my list and I need to go back."

"Underlying feeling of insecurity - it's always there eroding your confidence no matter what you accomplish. The feelings of inadequacy don't go away even though I've achieved much success. I also find I fatigue faster than most people because I have to work harder at things."

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

Ninety-one of 102 participants (89%) responded they have learned to manage their LD. This figure is more than 78% in 2009, but still less than the 2008 figure of 92%. It is higher than 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: 47
- Coping strategies: 30
- Adaptive technology/computer: 21
- Know own strengths/weaknesses: 21
- Self acceptance/self-advocacy: 10
- Give myself more time for tasks: 8
- Ask for help: 7
- Recognizing my triggers: 1
- Learning strategies: 1
- Medication: 1

One participant wrote: "I am aware of my LD which allows me to constantly try and improve. I have created exercises that help me in some aspects and have developed little things at work that help me with names, faces, and other things I need to recall quickly.". Another participant simply wrote: "I have coping mechanisms integrated into my daily routine." Responses like these make us very happy to turn a *Transitions* Trend into a Finding this year.

Finding #17: Overall, Transitions participants feel they have learned to manage their learning disability.

VI. CONCLUSION

Historical Context for Success of LD Students in the *Transitions* Longitudinal Study

By Larry McCloskey

Background

Across Canada the issue of disability inclusion and success in education has been gaining momentum over the past few decades. Exact numbers are difficult to obtain, and depend upon how one defines disability. According to the 2006 PALS data (Participation and Activity Limitations Survey), 202,350 Canadian children from 0 to 14 years of age had some form of activity limitation Increasingly, disability in the educational sector is being defined by the extent to which it impacts on academic functioning, and therefore includes many non-visible disabilities that have only been recognized in recent years. Learning disabilities were among these latecomers, and still are not generally recognized in Quebec, and Asperger's Syndrome is an example of very recent non-visible inclusion in education.

In 2006, there were 165,880 children with disabilities between the age of 5 and 14 in Canadian schools, with 83.9% enrolled in schools with special education classes (Canada, 2009, p. 23). Perhaps nothing has transformed the educational landscape for children with disabilities more than the recognition and development of *Special Education* as an area of expertise in the teaching profession (adapting curriculum and student support according to educational/ disability student need).

Children with disabilities who are not identified during their early school years, and who are not given appropriate individualized supports, are significantly disadvantaged. In 2006, 85.4% of identified children with disabilities between the ages of 5 and 14 required educational aids, but 24.5% of these children did not get the aids that they required in order to successfully learn and participate in the classroom (Statistics Canada, 2006). Additionally, 5.7% of children with disabilities require some form of building modification, with 29.3% having unmet needs. For students who cannot easily access their school or have had to choose their school on the basis of accessibility rather than academic excellence and/or student supports, successful educational outcomes are greatly compromised.

In 2011 problems persist, even as the percentage of persons with disabilities aspiring to postsecondary education attainment is growing, coupled with increased expectations that these students have to compete with the general population. Certainly students with disabilities who make it into post-secondary programs have dramatically better chances of success than as recently as 15 years ago. It must be emphasized that the supports available to students with

disabilities vary considerably across Canada. The issue of provincial standards of service for Canadian students with disabilities must be resolved in order to achieve acceptable national educational outcomes in the future. Though a national agreement with and amongst provincially administered Ministries of Education is a difficult issue, government leaders and policy makers should take note of the fact that tangible positive outcomes based on empirical information are achievable for Canadian students with disabilities who are appropriately supported throughout their education.

The lack of a national education policy contributes to inequity for students with disabilities in several ways. "Policy differences include differences in the criteria used to determine the services for which children are eligible, in services provided to children with similar disabilities, and in the allocation of resources for providing these services" (Kohen, Uppal, Guevremont & Cartwright, 2006, p.1).

In 2006, 43% of children with disabilities in Canada were receiving some form of special education. However, several provinces were significantly below this average as follows: Prince Edward Island at 22%, Nova Scotia at 35% and Manitoba at 32% (Statistics Canada, 2006).

According to the 2006 PALS survey, 75% of parents report that the most common reason for having difficulty accessing services for their children is lack of funding within the school system. One of the most contentious and difficult services to obtain is access to professional assessments, which is often the vehicle upon which individualized services are determined. Though the Canadian average of children with disabilities accessing a psychologist or psychiatrist is 63%, this percentage is much lower in Newfoundland and Labrador at 48%, New Brunswick at 43% and Prince Edward Island at 34% Statistics Canada, 2001).

Educational outcomes are not where they should be and nothing less than parity with the general population will satisfy anyone interested in improving educational outcomes. In 2006, 25.4% of adults aged 25-64, had not finished high school compared to 13.5% in the general population. Also adults with disabilities are more likely to have trade diplomas and certificates (14.7% vs. 12.0%) and less likely to have bachelor's degrees (8.3% vs. 15.3%) than the general population. As well, persons with disabilities have lower college education attainment at 21.8% compared to 26.5% in the general population. The fact that adults with disabilities have less college completion and approximately half the university degree attainment of the general population is particularly troubling (Canada, 2009, p.27).

It follows that the employment rates for persons with disabilities are closely related to educational outcomes. Of those Canadians without disabilities available to participate in the labour market, the employment rate increased from 73.8% to 75.1% between 2001 and 2006. For persons with disabilities available for employment, the increase went from 49.3% to 53.5%, a figure markedly lower than the general population. For women with disabilities the rate is 52.1% compared to 55.5% for men with disabilities, which is actually less of a gender gap than in the general population (Canada, 2009, p.32).

A point of concern when looking at education outcomes is the fact that employment rates vary considerably according to severity of disability. Only 46.8% of employment ready persons

with severe to very severe disabilities are employed full time, compared to 57.9% with mild to moderate disabilities.

Association (CMHA) reports that the cost of undiagnosed and untreated mental illness to Canadian business is $33 billion per year in lost productivity. The LDAC report argues that the correlation between learning disabilities and mental illness is strong (Crawford, 2002, p. 1).

The cost to individuals with learning disabilities throughout the lifespan is a shocking $1.982 million per person. This figure is refined with a discount of 5%, calculated in 2000 dollars, to reduce the incremental cost to $455,208 per person (Crawford, 2002, p. 1).

The cost of learning disabilities to Canadian society is a staggering $3,080 billion per year, reduced to $707 billion using the same 5% discount rate assumption. LDAC also calculates this huge cost, in consideration of direct cost as well as lost income due to unrealized potential. Individuals with LD and their families pay for 61.4 % of this total, and public programs pay for 38.5%, and private sector insurers pay only 0.1 % (Crawford, 2002, p. 1).

It does make sense that the calculation of cost takes into consideration both actual direct costs, as well as the indirect potential loss of income, due to poor educational outcomes, particularly postsecondary educational attainment. But to give this analysis some perspective, even at the reduced 'discount rate' calculation, a yearly $707 billion cost to society is not far below Canada's entire annual Gross Domestic Product. Given that this report was released in 2007, it is surprising that the report does not balance this grim portrait by at least acknowledging the leveling potential of postsecondary educational attainment. Though there were few successful students with learning disabilities completing postsecondary education as recently as 20 years ago, today many students with learning disabilities do survive, thrive and graduate from college and university. In fact, a recent research intensive pilot program has demonstrated that properly supported students with learning disabilities can graduate from college and university at the same rate of success as the general population (Nichols, Harrison, Weintraub & McCloskey, 2002, p. 5). Though such a claim may seem rather bland, given recent history, the transformation is nothing short of fantastic.

A Profile of Learning Disabilities in the Postsecondary Sector

In survey submissions and focus group discussions conducted by the Learning Opportunities Task Force, many students with learning disabilities talked about their sense of inadequacy, failure and low self-esteem as a result of having a learning disability. Many students said that they felt stupid and incapable of learning. Brown writes about the need to "retain and reclaim a space to announce their abilities as thoughtful, capable social actors, apart from understanding of deficit" (Brown, 2009, p. 97). Brown further writes, "Ideologies of meritocracy and normalcy are rewoven to offer a new reading of disability and ability which do not duel" (Brown, 2009, p. 97). True enough, however, Brown does not offer any insight into how, practically speaking, these non-dueling ideologies might be rewoven— this dilemma

is at the heart of the matter for many programs and interventions offered to students with disabilities in general, and to students with learning disabilities in particular.

With the best of intentions, student services in postsecondary education have tended to be developed and become entrenched without consideration of program evaluation measures. It is equally true that disability services and the establishment of standard academic accommodations have developed without examining the efficacy of the intervention. As larger numbers of students with LD and with more complex needs have aspired to postsecondary education with the expectation of individualized accommodations, the need for targeted interventions based on empirical information has become essential.

Best Practices in Education for Students with Learning Disabilities

Without a doubt, the best example of transformation for a group of students with disabilities towards positive educational outcomes is students with learning disabilities in colleges and universities in Ontario during the past 14 years. Therefore in order to create a workable model that could be adopted for full inclusion by all disability groups, this section will profile the work of the Learning Opportunities Task Force research pilot program (1998-2002) as well as the *Transitions* Longitudinal Study (Narraway, et al., 2005) that followed. This 10 year longitudinal study was created in 2004, to follow a cohort of Ontario students with LD who had received LOTF support, in order to determine the efficacy of postsecondary attainment for adults with learning disabilities. (Please note: the *Transitions* Study has been shortened to seven years, concluding June, 2011).

The LOTF initiative was commissioned by the then Treasurer of Ontario, Ernie Eves, who allocated $30 million to enhance the supports for students with learning disabilities in Ontario colleges and universities.

On May 6th, 1997, Ernie Eves made the following statement in his budget speech:

"Too few students with learning disabilities get the help that they need to make the transition to college or university. To help these students realize their potential, we will establish pilot projects at the college and university level, to provide real help to learning disabled students in a meaningful way."

The pilot program was intensively research and outcome-based, and as such is the perfect vehicle with which to contrast familiar "failing patterns" that existed until 1997, against successful student outcomes that followed. For example, from the beginning of the pilot project, success indicators were established that were comparable to success within the general population. These success indicators were a marked departure from the thinking before LOTF was established, which tended to seek a lower, achievable educational outcome and not be overly concerned with outcomes most likely on students' minds: *graduation and employment*. Thus the establishment of *best practices* that were intended to follow the establishment of

Success Indicators set a high, empirically based standard in the learning disability world.

The Success Indicators were as follows:

1. Entry into an academic program of the student's choice, provided that the student meets the standard entrance requirements.

2. Successfully meeting the essential requirements of the program, although the manner in which the student demonstrates mastery may be altered by academic accommodations, program modifications or use of coping and compensatory strategies, but with no change to standards or outcomes.

3. Graduation from the students' chosen program and institution.

4. Possession 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.

5. Being employment ready.

6. Being sufficiently job ready so that he or she can advocate for any job accommodations that may be required to obtain and maintain employment.

At the beginning of the LOTF mandate, under the leadership of Dr. Bette Stephenson, a call for proposals was sent out to all postsecondary institutions in Ontario. Thirty five proposals were received from the forty-seven eligible postsecondary institutions. Some institutions chose to submit proposals in partnership with the consequence that eight pilot projects were chosen from thirteen educational institutions. LOTF's expectations from the beginning required that the participating pilots adhere to strict research standards. Students in turn were accepted into the comprehensive pilot programs on the condition that they agreed to participate in the rigorous research requirements.

Three very detailed questionnaires were developed, as follows:

1. The intake questionnaire, distributed to every pilot student within 2 to 4 weeks of beginning the pilot program (50 questions).
2. The progress questionnaire which pilot students completed once a year, during the four years of the pilot programs (39 questions).
3. The exit questionnaire, to be completed as the student prepared to leave the pilot program, typically though not necessarily at graduation (36 questions).
4. (Nichols et al., 2002, Appendix A, p. 5).

There exists much controversy in the LD world regarding a universal definition of learning disability as well as the ingredients that constitute a proper psycho-educational assessment. LOTF was determined that the pilot student population was in fact a cohort of students with legitimate learning disabilities. Therefore LOTF did a great deal of work to establish criteria for the establishment of diagnosis of learning disability, setting a new and higher criteria which required that many of the pilot students be given new, full psycho-educational assessments. Consequently, during the four pilot years 1242 students were validated as learning disabled,

having met LOTF's rigorous criteria and as such, "this made the LOTF project the largest research endeavor of its kind in the learning disabilities field, unique both in its depth of enquiry and the selection process of participants" (Nichols et al., 2002, p. 2).

Interestingly, though traditionally a much greater percentage of males have been diagnosed as having a learning disability, in the LOTF cohort the gender distribution was fairly even, with 46.5% women, and 53.5% men. In terms of postsecondary aspiration, 19% expected a college certificate, 50% a college diploma, and 26% a university degree. Also, a key consideration was that fully 35% of the pilot students reported that they had to repeat a grade at some point in their elementary or secondary school career. This included 41% of college students and 21% of university students (Nichols et al., 2002, Appendix, p. 26). So while LOTF set the bar high in terms of research expectations, the academic profile of the LOTF students was challenging.

During the pilot years, the pilot offices constantly adjusted and refined their programs and services on the basis on information received from the analysis of student questionnaires. Though student service offices often use the term 'best practices' to describe interventions they have found to be effective, LOTF's research-based approach remains unique in its emphasis on research. One of LOTF's most important findings was the extent to which students who committed to pilot programs were able to become "successful". Fully 93% of students indicated that their participation in the pilot was helping them to be more successful in their studies. As well, 96% of students indicated that they would enter the pilot again if given the opportunity (Nichols et al., 2002, Appendix, p. 23).

At the end of its four year mandate, LOTF wrote a series of reports, including a Summary Report with Key Findings and Recommendations. Given the history of persons with learning disabilities as well as LDAC's grim portrait in their very recent 2007 report (www.pacfold.ca), the first key finding is perhaps the most impressive.

Students with learning disabilities are as able to succeed in postsecondary education as their non-disabled peers, provided that:

1. Their academic and social experiences during the elementary and secondary school years appropriately address the individual needs of students with learning disabilities.
2. Their transition to postsecondary education is appropriately facilitated.
3. The necessary individualized supports, services, programs and/or accommodations are available to them during their postsecondary years and they choose to use them (Nichols et al., 2002, p.5).

After the Learning Opportunities Task Force pilot ended in 2002, there was a strong desire to extend the research and to examine outcomes beyond the educational experience. Almost no research has been done in Canada on adults with learning disabilities, and what has been done is not encouraging. Though the ability of appropriately supported LD students to successfully complete postsecondary programs had been proven, LOTF wanted to know if this success would continue after graduation.

In 2004, two years after the completion of the pilot programs, LOTF launched a 10 Year Longitudinal Study intending to follow post-pilot students and to examine their lives in three categories: continued postsecondary education, employment/ career pursuits, and in the social/ life balance arena.

The longitudinal Study, entitled ***Transitions***, developed a central question to focus its research: *Did the pilot components accommodate a student's learning disability in a manner specific to the educational environment, or did it teach transferable skills and personal resiliency in a way that allows for former pilot students to take control of and change their own lives?"* (Narraway et al., 2005, Executive Summary).

The notion of developing personal resiliency was a central theme throughout the LOTF pilot years. It was premised on experience with students who had successful educational outcomes – not just because they were able to overcome the limiting effects of their disabilities but also because they were able to apply what they had learned in competitive situations in the general population. Though in focus groups students often talked about the profound difficulties of their personal experience with learning disabilities, successful students managed to channel negative experience into positive coping mechanisms which developed personal resiliency. It is reasonable to assume that students with learning disabilities who achieve successful educational outcomes will be equally successful in the employment and career avenues. However, LOTF wanted to test this reasonable assumption, since there are no comparable studies that have been done in Canada.

"There is an assumption that attending and graduating from postsecondary educational programs improved employment opportunities, which provide higher wages, which increases financial and personal independence and thus enhances the overall quality of the lives of graduates: the question remains as to whether the assumption is true for young men and women who have learning disabilities" (Levine and Nourse, 1998, p. 231).

Longitudinal research is not undertaken lightly. Longitudinal studies suffer high attrition rates, particularly when dealing with young, highly mobile populations hungry to begin a career. Longitudinal studies are very difficult to secure funding for, especially given the short term financial planning of modern governments. In addition to participant attrition, researcher attrition has to be considered, and in the case of *Transitions*, much of the work has been done by four research assistants who began as graduate students, and who are themselves, young, highly mobile and hungry to begin their careers.

Still, panel studies—where the same cohort is asked a series of questions over time—yield valuable quantitative and qualitative data over time that is unavailable in any other type of research. What is actually known about adults with learning disabilities in Canada regarding their postsecondary education attainment, employment and career prospects and social/life balances indicators, is for the most part, speculation. Though the United States is ahead of Canada in terms of researching their LD population, what is known years after receiving LD programming is not much different:

"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 20's 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, 1998, p. 220)."

The *Transitions* longitudinal study began in 2004, a full two years after the cessation of the LOTF pilots programs. Finding participants who are willing to commit to participate in a study that requires the completion of 10 long surveys is daunting enough without having to conduct a forensic resurrection of participants. Much of the former pilot students' contact information changed between the end of LOTF and beginning of *Transitions*. Obtaining a 10 percent participation rate is considered a reasonably successful for longitudinal research. In its first year, *Transitions* managed to get 210 participants from 1242 eligible post pilot students. *Transitions* is currently in Year seven and has 125 participants. Interestingly, survey attrition, without exception, has been attributable to not being able to maintain contact information for people who move, change phone numbers, e-mail addresses, etc. Participants who have changed contact information without informing the research team have uniformly gladly continued with the study once/if they have been found again.

The rich quantitative and qualitative information that has been gathered and analyzed in the *Transitions* annual reports has been clustered into 23 *Transitions* Trend, As the study unfolds, some Trends are substantiated, while others are modified or eliminated by the information received. In this way, *Transitions* Trends that have stood the test of time will be established s research findings at the end of ten years. Together the annual reports provide a portrait of adults with learning disabilities that contrasts greatly with the grim portrait in the LDAC report, "Putting a Canadian Face on Learning Disabilities." Without doubt the most exciting feature of the *Transitions* emerging portrait is this observation: *Transitions* participants are generally graduating, working, living and thriving as successfully as the general population (www.transitionsportal.ca)

Clearly what is glaringly missing from the LDAC report is an analysis of the potential leveling affect of postsecondary education attainment for persons with learning disabilities. This omission is particularly perplexing since students with learning disabilities make up at least 1/3 of students with disabilities who have self –identified and registered at colleges and universities in Ontario. Astonishingly, the report does not indicate that it is not only possible for a person with a learning disability to complete postsecondary education, it is becoming commonplace. *As such, the transformation in under 15 years of postsecondary educational outcomes for persons with learning disabilities in Ontario is a system outcome that must be noted and should be studied and implemented for all students with disabilities in all provinces*.

A few highlights from the most recent *Transitions* report might serve to illustrate the advancement of adults with learning disabilities and contrast the LDAC report. It must be emphasized, however, that though we do make some comparison between *Transitions*

participants and the LDAC report, the benchmark for success throughout the Transitions study has always been comparison with the general population.

emphasized, however, that though we do make some comparison between *Transitions* participants and the LDAC report, the benchmark for success throughout the Transitions study has always been comparison with the general population. Educational, career, and social outcome comparisons with the LDAC report understate how far well-educated LD adults have come. One comparison between the LDAC report and Transitions will serve to illustrate this point. The LDAC report notes that 41.2% of LD adults are unemployed, and 26.3% only earn between $1-999 annually. In the latest Transitions report, 80% of participants are employed, and of these, 72% earn salaries of $20,000 or more.

Of the 125 participants in *Transitions*, 42 have graduated from two postsecondary programs and eleven have graduated from three postsecondary programs. The retention rate for postsecondary students in the general population is approximately 85% (percentage of those who stay their program), whereas among the *Transitions* cohort the rate is much higher at 91%. In 2009, 69% of participants felt prepared to seek employment; in the latest 2010 report that figure has risen to 80%. As well, 74% of participants indicated satisfaction with their jobs, which is an impressive figure for most people in entry level jobs. Also noteworthy, in the latest report an all time high of 93% of participants reporting having good relationships with their coworkers, a figure that would be the envy of any workplace, and this an area not assumed to be a strength for adults with learning disabilities.

Positive success measures are not meant to deny that problems will persist for people with learning disabilities despite improved educational supports. Certainly there are a couple of areas of concern. For example, 44% of participants report being held back in their lives by debt. As well, though 78% report being able to manage their learning disabilities, this figure is lower than the high of 90% in 2008. Overall participants show resilience and have made progress in their careers, but a decline in their perception of managing their own learning disability is a *Transitions* Trend to monitor during the next three years as the study completes its 10 year term.

Still, given the overall positive findings from the LOTF final report and emerging findings in *Transitions* Trends, the following educational recommendations are made:

Overall Recommendations

1. All teacher training for certification include comprehensive instruction on disability issues, and practice accommodating the individual needs of students with disabilities
2. Psychologists are consistent about definitions and agree upon criteria for diagnosis.

Primary School

1. It is essential that students with disabilities be assessed and identified in their early years.
2. Comprehensive annual individual education plans are developed and based on ongoing, meaningful assessment of student need.
3. High quality adaptive technology assessment and training begins early and continues as the student progresses.

Secondary School

1. Metacognitive training is given to students properly identified to allow them to develop their own academic strategies, and as a consequence, personal resiliency.
2. Well trained teachers are given adequate time, training and resources in order to conduct annual reviews of educational plans, with the student taking responsibility and an active role (with the goal of creating life-long, independent learners).
3. Transition programs such as MTCU's Summer Transition Program is expanded to transition programming for the full academic year for all LD students intending to enroll at college or university. Most important, transition programming should be extended back to as early as grade 9, so that LD students are able to make informed choices about realistic post-secondary opportunities.

Post-secondary Education

1. Strategic transition is supported with education plans and updated assessments provided to post-secondary disability office coordinators before the commencement of classes.
2. Timely and frequent access for students to knowledgeable disability coordinators is fully supported for all students' entire years of study.
3. Career and personal counseling is available to students throughout their entire years of study.
4. Strategic transition is provided into the workplace including workplace co-op, mentoring, as well as opportunities to gain work experience to build one's resume.
5. The Ministry of Training Colleges and Universities' AFSD (Accessibility Fund for Students with Disabilities) be expanded in order to keep pace with the growing numbers of students with disabilities, whose requirement to successfully complete post -secondary education has been shown to be of greater importance than for the general population.

Summary

The innovative work of the Learning Opportunities Task Force and the *Transitions* Longitudinal Study demonstrates that students with disabilities who are properly identified early on and appropriately supported can have as successful educational outcomes as the general population. Though this statement may seem somewhat simple, for those familiar with the history of education attainment for students with learning disabilities, such a claim is very powerful.

As well, *Transitions* has demonstrated that successful educational outcomes can lead to successful employment and career outcomes. However, for both educational and employment outcomes to be successful, the investment of appropriate, individualized and continued support is essential.

Full Circle—the expanding application of what has been learned by the LOTF and Transitions Research

The LD program supports or development of 'best practices' are not only now accepted within the post-secondary community, they are now being recognized as potentially applicable to any student at risk of falling between the cracks.

All students with disabilities, and students with learning disabilities in particular, have to jump through hoops in order to get accommodated. In order to establish a diagnosis of learning disability students have to have completed a Psychoeducational Assessment, under the signature of a Clinical Psychologist. Those whose assessment establishes the existence of a learning disability are assigned a Coordinator in order to put appropriate supports and accommodations in place. The rapport between the student and coordinator is important since the goal is to make students into successful and resilient independent learners. And while many of the supports and interventions in disability offices are LD specific (i.e. academic accommodations), much of the success with LD students is based on the counseling/ mentoring/coaching rapport that has yielded tangible, academic dividends.

It is no wonder that students with learning disabilities have been succeeding at colleges and universities in Ontario, particularly after the establishment of LOTF. A Psychoeducational Assessment provides a unique opportunity to understand one's own metacognition—that is, insight into how one learns and what one's strengths and weaknesses are, in a way that others students are never given. The coordinator/counseling relationship provides structure and discipline for students many of whom need structure in order to keep up with their work, maintain motivation and avoid procrastination. This coordinator/student agreed upon structure is greatly strengthened by the fact that the student is working with someone--in fact the only person in the university--who fully understands their learning style, and personal challenges, and is fully invested in their success. Given these positive and unique program supports, it begs the question, what student would not benefit from this level of support?

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VIII. 7TH YEAR SURVEY

SECTION I: PERSONAL INFORMATION

1) Name: _____

2) Gender: Male □ Female □

3) Age: _____

4) Pilot Institution: _____

SECTION II: EDUCATION

5) Are you currently studying? □ Yes □ No*

*If you answered No, please skip to **Question #6**

IF YOU ARE CURRENTLY STUDYING

5a) Are you attending: □ University □ College □ Certificate Program

5b) Field of study: _____

5c) Are you registered: □ Full-time □ Part-time □ Special Student

5d) Are you registered as a student with a disability? □ Yes □ No

5e) Do you use accommodations (i.e. extended time on exams, reader, scribe, etc.) provided by the Special Needs Office at your institution? □ Yes □ No

5f) Do you use assistive technology to help with your studies? □ Yes □ No
(i.e. Dragon Naturally Speaking, Inspirations, Kurzweil, Spell-checker, Palm Pilot)

5g) If yes, what kinds of assistive technology do you use (i.e. Dragon Naturally Speaking, Inspirations, Kurzweil, etc.)?

_____

5h) Are you currently working part-time while studying? (i.e. Less than 35 hours per week

together with classroom study. This does not include summer employment unless one is taking classes during the summer semester.)

□ Yes □ No

5i) Are you currently working full-time while studying? (i.e. 35 hours per week or more together with classroom study. This does not include summer employment, unless one is taking classes during the summer semester.)

□ Yes □ No

5j) Are you currently working at a non-paying internship/placement? □ Yes □ No

5k) Do you currently have a paid co-op placement? □ Yes □ No

5l) Do you feel prepared to seek employment after graduation? □ Yes □ No
(Please specific about your reasons why or why not.)

_____

5m) Do you face any challenges at school due to your LD? □ Yes □ No

_____

6) Have you graduated from a college or university program? □ Yes □No

*If you answered No, please skip to the ***Specialized Education Questions*** below and follow the instructions

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 program year of graduation, and institution. (If you selected more than one program, remember to write the year of graduation and the school you graduated from for each. If you graduated with two degrees, diplomas, or certificates, please make this very clear)

a) □ University Degree Year/Institution
b) □ College Diploma Year/Institution
c) □ College Certificate Year/Institution

IF YOU ARE CURRENTLY STUDYING AND DID NOT GRADUATE

8a) Are you still in the academic program you began as a pilot student? □ Yes □ 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) □ 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? □ Yes □ 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 one answer that best describes your situation and then expand on your choice.)

a) □ Require further qualifications to attain the job or career I want (i.e. B.Ed., trade

certificate)
b) □ To become more specialized in my field (i.e. graduate school)
c) □ To obtain higher pay in my field
d) □ Love of education
e) □ Concern over leaving school and having to seek employment

13b) Please elaborate: _____

14) When do you expect to graduate? Month: _____ Year: _____

15a) Do you intend to pursue still further education after graduation? □ Yes □ No

15b) Please elaborate on your reasons why or why not.

_____

IF YOU ARE NOT CURRENTLY STUDYING AND DID NOT GRADUATE

16a) Why did you leave your program without graduating? (Please choose any reasons that apply and then expand on your choice.)

a) □ did not enjoy program of study
b) □ financial concerns (i.e. must work a lot, difficulty paying tuition)
c) □ cannot decide what career to pursue
d) □ found part-time employment
e) □ found full-time employment
f) □ could not pass all the courses/requirements for graduation

16b) Please elaborate: _____

17) Do you want to graduate from the program that you began as a pilot student
□ Yes □ No
18a) Do you plan on returning to school in the future? □ Yes □ No
18b) If yes, when do you plan on returning? Month: _____ Year: _____
18c) If yes, what program do you plan to pursue? _____

18d) If yes, what do you feel you need to do to ensure that you successfully graduate?
_____
18e) If no, why do you not wish to return to school?

IF YOU ARE NOT CURRENTLY STUDYING AND HAVE GRADUATED

19a) Did you feel prepared to seek employment after graduation? (Please be about your reasons why or why not). □ Yes □ No

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 answer that best describes your reason for returning to school.)

a) □ To obtain further qualifications to attain the job I want (i.e. B.Ed., trade certificate)
b) □ To become more specialized in my field (i.e. graduate school)
c) □ To obtain higher pay in my field
d) □ Love of education
e) □ Difficulties seeking employment

20c) Please elaborate: _____

20d) If yes, when do you plan on returning to school? (Include month and year)
_____

20e) If yes, what program do you plan to pursue? _____

SECTION III: FINANCIAL CONCERNS

21) Have you ever had any student loans? □ Yes □ No
(If Yes, proceed to Question # 22a. If No, proceed to Question #23)

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 loans? (Please be as exact as possible.) $_____

22c) If yes, does your debt load prevent you from enjoying the lifestyle that you want? (Please elaborate below.) □ Yes □ No

22d) If yes, please elaborate on what effect your student debt have on your life at this time:

SECTION IV: EMPLOYMENT

23) Are you currently employed? □ Yes □ No

IF YOU ARE CURRENTLY EMPLOYED

24) What is your current employment status? (Please choose the one response that best describes your current situation. Remember full-time is considered 35-hours or more per week.)

a) □ Full-time permanent c) □ Part-time Permanent e) □ Contract
b) □ Full-time temporary d) □ Part-time Temporary f) □ Casual
g) □ Paid Apprenticeship h) □ Paid Co-op i) □ Seasonal
j) □ Summer Employment (choose this if you are currently studying and know that you will be working only during the summer months and not during the academic year)

25) What type of work do you do? (Please choose the category that best fits your job)

a) Security/Corrections c) Retail/Customer service/Sales e) Healthcare
b) Restaurant/Hospitality d) Office/Administrative f) Education
g) Health and fitness h) Construction/Factory/Trade i) Agriculture
j) Computers/Internet k) Media/Communications l) Automotive
m) Childcare/recreation n) Accounting/Finance o) Government
p) Other: _____

26) How long have you been with your current employer (in years)? _____

27) On average, how many hours do you work in a week? _____

28) What is your *expected* annual gross salary for 2007? (only numbers) $ _____

29a) For the purposes of this study, *underemployment* is defined as "employed at a lower level than your education and work experience warrants."

As such, would you consider yourself to be underemployed at this time? □ Yes □ No

29b) If Yes, please discuss whether your career is progressing as it should be in terms of responsibility and salary based on your education and work experience:

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 □ No

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 □ Positive

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?

□ Yes □ No

34a) Do you use any accommodations (i.e. extended time to complete tasks) at work due to your LD? □ Yes □ No

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 work on account of your LD?
□ Yes □ No

35b) If yes, what type of assistive technology do you use? (choose any that apply)

a) □ Dragon Naturally Speaking
b) □ Inspirations
c) □ Kurzweil
d) □ Spell-checker
e) □ Palm Pilot
f) □ Others: _____

35c) If yes, did you:

a) □ Request assistive technology to be provided by your workplace
b) □ Install it yourself (i.e. bring in your own)

35d) If no, (you do not use any assistive technology to help you with your work), why not?

36a) Do you *currently* face any challenges related to your LD at work? □ Yes □ No

36b) If yes, what would you say are the biggest challenges you currently face at work?

_____

37) Do you have a comfortable working relationship with your colleagues? □ Yes □ No

38a) Do you socialize with your colleagues outside of the workplace? □ Yes □ No

38b) If yes, how often do you socialize with your colleagues outside of the workplace?

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? □ Yes □ No
(Please elaborate on why or why not in the *Comments* section below.)

Please elaborate: _____

39b) Do you feel that you are achieving a healthy work/life balance? □ Yes □ No

Please elaborate: _____

IF YOU ARE CURRENTLY UNEMPLOYED

40) What has been your employment history since graduating or leaving school?

41a) Are there extenuating circumstances related to your unemployment? (i.e. health, injury, maternity leave)? □ Yes □ No

41b) If yes, what are they? _____

42a) Please rank in order of importance which factors you believe will help ensure a successful job search: (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) Have you used any of the above strategies to help you find employment?
□ Yes □ No

42c) If yes, which ones? _____

43a) Do you feel hindered in the workforce because of your LD? □ Yes □ No

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
□ 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 you 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) □ 26-30 hours/month
g) □ over 30 hours/month

44c) If yes, what are your reasons for volunteering?

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 activity do you do? (choose any that apply)

a) □ Group sports/intramural teams (i.e. soccer, baseball, hockey)
b) □ Individual sports (i.e. walking, running, martial arts, yoga, etc.)
c) □ Recreational sports (i.e. work out at the gym, participate in an exercise class, etc.)
d) □ Outdoor activities (i.e. camping, hiking, kayaking, etc.)
e) □ Other: _____

45c) How often do you take part in a physical 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 social person or solitary person? Please

explain if possible: _____

47) If you have free time, do you generally choose to spend it:

a) □ With others
b) □ Alone
c) □ Both equally
d) □ Don't have free time

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 live on your own)
b) □ Cultural reasons
c) □ Still dependant upon parents (emotionally, etc.)
d) □ Parents are dependent on you (i.e. you're taking care of your parents)
e) □ Preferred living arrangement at this time

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 parents, spouse/partner and children)
e) □ With spouse/partner
f) □ With children
g) □ Alone

48e) Please elaborate: _____

RELATIONSHIPS

49) Regarding your *friendships*, 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 friends

50) Regarding your *relationships* 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 *family* 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? □ Yes □ No

52b) If yes, what would you say are the biggest challenges you *currently* 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: _____

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.)

□ Yes □ 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 *Transitions* 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. APPENDIX

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.