Transitions Longitudinal Study

Annual Report to the Ministry of Training, Colleges and Universities

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TRANSITIONS

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EXECUTIVE SUMMARY

In 1997, the Learning Opportunities Task Force (LOTF) was given the mandate to create a level playing field for post-secondary students with learning disabilities in Ontario. LOTF established Success Indicators, and was structured as a research project in order to gauge its progress with students, make adjustments to its pilot programs, and be accountable to the Ministry of Training, Colleges and Universities.

As a research project, LOTF was unprecedented in the world. Perhaps its most striking feature was that the pilot project evaluations emphasised student input first and foremost. Though there was some scepticism that students with learning disabilities would be willing to complete written evaluations, over 3000 questionnaires were received from pilot students between 1998 and 2002.

LOTF also addressed the thorniest of issues in working with a large population of students with learning disabilities. In order to ensure that all students had a verifiable learning disability, the pilot institutions participated in a rigorous validation process. As a result, 1242 students met the validation criteria, received pilot services, and participated in the pilot projects' evaluations.

As the research project progressed and it became apparent that the Success Indicators were being met, LOTF began to turn its attention to a legacy. With input from the very capable pilot staff, pilot components were refined and the Enhanced Services Fund (ESF) was created. The Enhanced Services Fund was successfully entrenched into all post-secondary institutions in Ontario in 2002, which consequently allowed for a seamless transition of essential services for students at the pilot institutions.

Still, LOTF, with its penchant for research-driven outcomes, was not fully satisfied. There exists a great deal of empirical evidence to support the notion of post-secondary education holding the key to success in the conventional sense of the word. It has been a reasonable assumption that the same applies to students with learning disabilities who complete post-

secondary programs. However, just how successful LOTF students will be after participating in the pilot programs is not known. LOTF amassed an impressive amount of data to show that the services and programs offered by the pilots assisted students with successful transition into and throughout their post-secondary programs. Still, LOTF wanted some insight into the extent to which educational success translates into success in employment, career and social aspects of one's life.

Thus, the working question for *Transitions* Longitudinal Study is this: 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?

Longitudinal studies are difficult to conduct under any circumstances. They are expensive, complex, and suffer high rates of attrition of both participants and researchers. *Transitions* had the additional burden of having to search for and engage participants a full two years after the cessation of the pilot programs. Based on a validated number of 1242 pilot students, we set our sights on finding 100 committed participants. Through the hard work of pilot contacts, whose job it was to help identify and find former pilot students, and our researchers, 210 participants signed consent forms and completed intake questionnaires in the first year.

The quantitative and qualitative information assembled is impressive. We have identified a number of preliminary trends among our panel, but we must be cautious about making any conclusions at the end of this first year. In the absence of a control group it is always difficult to draw conclusions in longitudinal studies from information generated by the surveyed panel. What this means for *Transitions* is that it is difficult to establish a causal relationship between our population and the effect of the pilot programs received between 1998 and 2002. However, this weakness inherent in longitudinal research becomes its strength as time goes by. The lack of a control group will be addressed by comparing the patterns exhibited by the panel in comparison to itself from one year to the next. When a number of

years have passed, trends will become established and we will be able to make conclusions with confidence.

Further, we have attempted to address the weakness of not having a control group by offering a substantial amount of comparison data to trends of post-secondary students who have graduated within the general population. Adults with learning disabilities have traditionally not fared well compared to the general population. However, having issued a cautionary note about drawing early conclusions, this report lists a number of preliminary or emerging trends that we have referred to as ***Transitions* Trends**, which are presented in the report as follows:

Transitions Trends

1. Participants' current level of satisfaction with the LOTF pilot programs remains high years later
2. Relationships have endured with staff at former pilot institutions
3. *Transitions* participants place a high value on post-secondary education
4. *Transitions* participants combine post-secondary education and work reasonably well, even as they pursue career avenues
5. Taking into account the fact that the average age of our panel is 25.66, a high percentage of *Transitions* participants are currently living with their parents
6. *Transitions* participants have lower salaries than the general population, and may be experiencing under-employment
7. *Transitions* participants have a higher than average retention rate in post-secondary education than in the general population
8. PSE Leavers employed full-time are generally earning high salaries that are comparable to graduates in the general population
9. Field of study choices likely influence low salaries of *Transitions* participants

10. Transitions female graduates are more likely to be under-employed than males

11. Overall unemployment rate of 15% among *Transitions* participants is higher than in the general population

12. Generally, former pilot students are functioning well, since 94% consider themselves to be coping well and not greatly affected by their learning disability

13. Academic and Employment issues continue to be obstacles for *Transitions* participants, but less so than for the pre-pilot population

14. Participants appear to be resilient about their social relationships, though this is an area of some concern

15. *Transitions* participants have chosen careers that build on their areas of strength and interest

16. *Transitions* participants disclose their learning disability at work only when it is necessary for the job

Our assumptions about how *Transitions* participants are faring in the first year are based upon our knowledge about learning disabilities, and comparisons with the general population. To the extent that our population is relatively close to indicators from the general population, we regard this as a benchmark for success. The playing field may be very close to being level. Accordingly, the trends we are showing do not seem to be earth shattering, and perhaps not even particularly interesting. However, given how adults with learning disabilities have traditionally fared, achieving benchmark indicators comparable to recent graduates within the general population is interesting, and perhaps even impressive. Our results show a number of areas of real concern, mostly related to levels of income, unemployment and under-employment. To a lesser extent there may be some concern related to participants' relationships, but we need to probe further into this area before drawing conclusions. Overall, these early trends are very encouraging indeed.

One of the strengths of longitudinal research is that it measures change over time. Therefore, longitudinal studies are dynamic, noting and embracing

change as it occurs. As we note change and emerging trends, we will alter our questionnaires in order to probe deeper into issues as each year progresses. However, probing issues will not detract from our stated themes, and we will continue to ask questions about education, employment and participants' social well-being as we move forward. While we would like to see further evidence of progress from year to year both in relation to the previous year and to the general population, we will have to wait and see what actually transpires. This first annual report to the Ministry of Training, Colleges and Universities is an encouraging start to what promises to be a fascinating journey.

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I. INTRODUCTION

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

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

1. To improve the transition of students with specific learning disabilities from secondary school to post-secondary education, and

2. To enhance the services and supports that students with learning disabilities receive within the post-secondary educational sector, such that they can complete their education successfully.

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

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

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

These indicators were first articulated as:

- entry into an academic programme of the student's choice, provided that the student meets standard entrance requirements;

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

- graduation from the student's chosen program and institution;

- 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;

- being employment ready;

- being sufficiently job ready so that he or she can advocate for any job accommodations that may be required in order to obtain and maintain employment.

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

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

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

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

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

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

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

I. 1. The Application of Knowledge

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

▪ provision of learning strategy supports by appropriately qualified and engaged staff, and

▪ access to and instruction in assistive technology from staff with expertise in both the technology itself and learning disabilities.

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

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

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

▪ pilot institutions reported that 1120 pilot students utilised assistive technology and 1086 pilot students utilised learning and metacognitive

strategies during the pilot period

▪ pilot students cited assistive technology and learning metacognitive strategies as the most useful program components provided to them by the pilot projects

▪ 86% of pilot students indicated that they had used and/or plan to use assistive technology

▪ 94% of pilot students indicated that they had used and/or plan to use learning strategy and metacognitive training supports

On the basis of research, LOTF was able to refine certain components from each of the unique pilot programs into a set of focused supports that best assist students with learning disabilities to become successful and independent learners. Many of the institutions providing these services include transition programming into and out of post-secondary education, self-advocacy training as well as career counselling and training in their Enhanced Services Projects. Thus, the justification for ESF funding was easy to produce and accountability is equally easy to establish at any given time. In fact, the Enhanced Services Fund was purposely established to set an exemplary standard of accountability to the Ministry of Training, Colleges and Universities. If completion of post-secondary education was all that persons with learning disabilities required in order to be successful, the present level of supports, accountability, and enquiry would suffice.

I. 2. Beyond Success Indicators

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

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

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

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

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

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

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

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

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

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

"What happens 5 years beyond the transition period, or 10 years beyond,

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

I. 3. The *Transitions* Longitudinal Study

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

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

1. To inform persons with learning disabilities about their own potential and their continuing obstacles and successes in order to assist them in making positive changes for themselves throughout their lives.

2. To inform government and policy makers about the needs and abilities of students and persons with learning disabilities in order to make a positive

contribution to public policy and government sponsored programs and services, both in terms of fiscal responsibility and program effectiveness.

3. To inform post-secondary institutions with the intent of influencing their existing and evolving programs for students with learning disabilities, primarily ESF.

4. To inform prospective employers and government departments involved with job training and career and employment issues about the needs and abilities of adults with learning disabilities.

5. Finally, as an overarching goal, to broaden and keep relevant the Ministry of Training, Colleges and Universities' body of knowledge and information, regarding the efficacy of specialized programs and services for students with learning disabilities.

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

1. Education—to assess participants' views about their LOTF and post-secondary experience from a more distant perspective, and if relevant, their current educational involvement.

2. Employment/Career—to investigate the successes and areas of difficulty participants are experiencing in the labour market, and in finding career-related employment.

3. Social—given that a learning disability is a life long condition, and affects areas of functioning other than education and employment, examining social relationships, living arrangements and how participants choose to spend their non-working time is essential to establishing a holistic profile of our population throughout the duration of the study.

II. METHODOLOGY

II.1. Why choose to do a longitudinal study?

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

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

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

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

"Participants acknowledged that longitudinal research involves a substantial investment of resources for a significant period of time. They considered it to be "risky business" as compared to short-term studies (i.e. 6 months), in the sense that it is "unclear as to how things will work out in the long run." For example, longitudinal designs are at greater risk for

subject attrition, and losing the necessary funds to complete a project. Therefore, participants stressed, everything possible must be done to obviate risk over time, including conducting longitudinal studies at institutions with high credibility, capability, and stability, as well as ensuring the presence of a stable funding mechanism. Although participants thoroughly acknowledged the problems and risks associated with longitudinal research, they agreed that only longitudinal designs have the power to answer certain questions." (Raskind et al. 269)

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

"The concerns about the natural history of learning disabilities are of more than theoretical interest since they reflect directly on the validity and effectiveness of treatment programs. Furthermore, examination of the natural history of LD provides insights into whether or not observed changes are due to treatment effects or maturation. Long-term assessment, in addition to providing information about treatment efficacy, also provide insights into the extent to which the consequences of LD may be attenuated or accentuated by associated factors." (Raskind et al. 269)

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

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

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

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

Since panel studies must be very labour intensive in order to survey and assemble a body of information, they can be expensive, they require a great deal of time, and they suffer from high attrition rates. Although they are problematic in these ways, panel studies also yield the most comprehensive information about a population, and we are confident that we have been able to offset these risks. We have completed the first phase and begun the second phase of the study with modest cost and in an efficient manner. We are continuously following up with participants in the form of thank-you cards, communications, and frequent telephone calls and e-mails. As a result of our efforts, the response at the beginning of the second phase has been quite promising.

Based on the number of students who participated in the pilot programs between 1998 and 2002, and the fact that our efforts to find participants was a 'forensic' audit reaching back two years, our realistic expectation was to engage 100 participants in the study. Achieving a 10% baseline of participants from a population to be studied is the norm in longitudinal research. This 10% baseline is an approximate average for participation, even without the additional consideration of a two-year period of dormancy of the subject population. It may speak to the enduring impact of the LOTF pilot programs that we were able to engage and survey 210 participants.

II.2. Profile of the Panel

The following is a table highlighting the number of participants from each pilot institution:

Table 1

Participants by Institution

Pilot Institution	Participants
Conestoga College	33
University of Guelph	25
York University	25
Trent University	25
Canadore College	22
Fanshawe College	21
Loyalist College	17
Georgian College	16
Cambrian College	15
Nipissing University	11

The *Transitions* longitudinal study is fluid, so we will be accepting former pilot students for its duration. In fact, we already have seven new participants for the next phase – five from Georgian College, one from Loyalist College, and one from Canadore College. We hope to attract more former pilot students for the second phase of the study in order to compensate for inevitable participant attrition.

With respect to the demographics, the average age of study participants is 25.66, and they range in age from 19 to 49 years old. The gender split was fairly even, as the panel consisted of 95 males (45%) and 115 females (55%).

Ninety-five *Transitions* participants were attending post-secondary when interviewed in 2004. Of this number, 72 participants had not yet graduated, and 23 had graduated and returned to post-secondary. Of the 23 who returned to post-secondary, 9 are enrolled in university degree programs, 13 in college diploma programs and one in a college certificate program.

There are 38 *Transitions* students who are currently combining work and school. Twenty-seven of these employed students have not yet graduated, while 11 employed students combine work and a return to post-secondary. Of the 27 who have not yet graduated, 17 are

employed full-time, 11 are employed part-time and one participant did not state if his employment was full or part-time. Of the 11 participants who combine work and the pursuit of additional post-secondary qualifications, 7 are employed part-time and four are employed full-time. (However, there is some difficulty assessing whether the students who indicated full or part-time did so to indicate a summer job, or employment during school. For more information about this problem see p. 76 under the heading Studying and working concurrently.)

Fifty-seven participants who are still in school are not employed. Of the 57 who are currently studying and unemployed, 11 have graduated from post-secondary and returned, while 46 have not yet graduated.

Of 210 *Transitions* participants, 121 are currently employed. Of those who are currently employed, 14 are have left post-secondary without graduating and 38 are currently attending a post-secondary institution. Four participants who are currently employed graduated with college certificates, 14 graduated with university degrees, and 50 graduated with college diplomas.

Of the 14 students who left post-secondary without graduating and who are currently employed, 11 are employed full-time and 3 are employed part-time.

Of the four participants who are currently employed and who graduated with college certificates, two are employed full-time and two are employed part-time. Of the 14 who graduated with university degrees and are currently employed, 12 work full-time and two work part-time. Of the 50 participants who are currently employed and graduated with college diplomas, 41 work full-time and 10 are employed part-time.

Of the 32 participants who are not in school and unemployed, 9 have not yet graduated from post-secondary, while 23 have graduated and are unemployed. There are 5 university graduates who are unemployed, 12 participants with college diplomas and 6 with college certificates who are unemployed.

II.3. Getting Started

Over a period of nine months, we completed the first phase of the *Transitions* longitudinal study. In conjunction with the ten pilot institutions, hundreds of former pilot students were contacted and asked to participate in the study. The pilot schools were encouraged to assign one individual who would function as a liaison between the students and the Research Team. Establishing a contact person at each institution facilitated the most crucial stage of the study – the process of contacting potential participants, having them commit to be a part of the study, and getting them to complete and return a *Transitions* consent form. Potential participants were required to sign and date a consent form before they were eligible to complete the intake survey.

Once the pilot contacts were identified, we sent frequent reminders and established deadlines for contacting the students and for obtaining their agreement to participate. Some pilot contacts were prompt in terms of their replies and keeping us up-to-date on their progress. In contrast, staff at some of the other institutions were undergoing a 'restructuring' in early in 2004, which resulted in some confusion as to who would be responsible for contacting students about the study. These communication problems were rectified over time, and by July all ten pilot institutions had submitted consent forms.

During the process of contacting potential *Transitions* participants, the pilot contacts discovered that some former pilot students seemed to have vanished without a trace and it was impossible to get in touch with them. However, in some cases, students were still registered with the Special Needs Office at the same pilot institution – consequently, these students were easy to contact. The pilot contacts were offered assistance with problems in the process of locating students. Likewise, we obtained feedback from the pilot contacts as the participant search unfolded, and several of their suggestions were incorporated into the early stages of the study. For instance, the consent form became available online as a result of a recommendation by a

pilot contact.

Pilot contacts had various strategies for engaging and recruiting students for the study. At Canadore College, Disabilities Counsellor and Learning Strategist Mary Close began this task by finding the contact information for all of the former pilot students in the Counselling and Special Needs Department's database. She then proceeded to call or e-mail each student, and when she was unable to reach students because e-mail addresses and/or telephone numbers had changed, she would contact the students' parents to obtain the new information. After contacting the students to tell them about the study and confirming their current mailing address, Mary sent a package to each of them containing a consent form, pre-stamped return envelopes, and an individualised hand-written note. She also made sure to highlight the important parts of the consent form – i.e. where the signature was required - so that students would not be overwhelmed by all of the information contained in the package.

Similarly, the pilot contact from Georgian College's Research and Educational Development department, Kathryn Peet, was able to access a database containing the contact information for all of the former pilot students. She prepared a package for each student containing a document prepared by LOTF entitled 'Calling all Pilot Students', a consent form, and a letter from the Vice President of Student Services encouraging the students to participate in this worthwhile study. The package was mailed out to all students and was followed up ten days later with another letter as well as a phone call. By early March, the pilot contacts started to return original signed consent forms to the LOTF office in Richmond Hill and, in turn, LOTF sent photocopies of the consent forms to Larry McCloskey, at Carleton University in Ottawa.

While the pilot contacts were encouraging students to be a part of the study and collecting consent forms, we conducted an extensive Literature Review. We examined the methodologies of previous longitudinal studies, some dealing with adults with learning disabilities as well as others pertaining to the general population. Utilising this knowledge, as well as the structure of

previous LOTF questionnaires, we developed a preliminary survey that was comprised of both qualitative and quantitative questions.

When a final version of the questionnaire had been drafted, three students registered with the Paul Menton Centre for Students with Disabilities at Carleton University volunteered to test it. In a group setting and in the presence of one of the Research Assistants, the students discussed each question and made suggestions on how to improve some of them in terms of wording, clarity, or simply the order in which they were presented. The discussion group helped improve the survey tremendously, since the PMC students had had similar experiences to our panel. Some questions were also considered redundant by the test audience and were omitted from the final draft which, in the end, consisted of forty-five qualitative and quantitative questions.

II.4. The Portal

Since longitudinal design can seriously affect participant retention rates, we decided to supplement telephone surveying with Internet technology. We also assumed the Portal would be a natural fit for *Transitions* participants, who would gravitate towards it because of the comprehensive training in technology the pilot projects had afforded them. With the understanding that the majority of our participants have a sophisticated knowledge of computer technology, we assumed that offering the opportunity to take the survey on a web-based portal would work well.

Once the survey was finished and the consent forms were beginning to accumulate, Assistive Learning Technologist Boris Vukovic created the LOTF Portal. The Portal was designed specifically for the *Transitions* study, and it is the first time that a Portal has been used in a longitudinal study of

this nature and magnitude. As a result, we were able to administer the survey through an online, database-driven system in addition to paper format over the telephone.

Other features of the Portal include access to a web-based communication and file exchange portal as well as an access point for current information about *Transitions*. The online survey administration system provides significant benefits in the areas of accessibility and data management. Due to the ubiquitous nature of the Internet today, an online survey is accessible at any time and from different locations, the questions can be enhanced with interactive support, and the survey submission process is automatic and cost-free both to the participant and the survey administrator.

In the case of this study, data collected through the online survey was directly stored through user submissions in a server-side database. Also, the security of the information was preserved through authentication and data encryption, and data management and manipulation was enhanced through flexible means of exporting to external statistical or spreadsheet packages. A database of participants with their demographic information, their responses to survey questions, and a unique token ID number for each individual was created as each survey was inputted. The token ID numbers will remain the same throughout the study, which will allow us to track the participants' submissions over time and to facilitate the process of exporting all of the demographic information to a new administration site with each phase of *Transitions*.

We also hoped to prevent participant attrition by providing an online community to serve the *Transitions* participants and the pilot contacts. The LOTF Portal is designed to provide users with communication tools such as discussion boards, user-to-user messaging, and a polling system. From the administrator's side, the Portal provides means to post announcements, reference articles, and Internet website resource lists. As an entry point to the actual survey, the Portal is a resource on issues relevant to former pilot students. It is also envisioned as a gathering place for the *Transitions* Research Team, as well as other learning disabilities support staff at colleges

and universities across Ontario who are working under the Enhanced Services funding umbrella. Such users can act as experts available to answer questions and contribute to discussion and resources for students with learning disabilities on the LOTF Portal.

During the first phase of the study, some time was spent adding to the Portal and attempting to turn it into the invaluable resource it has the potential to be, and this project is still ongoing. An impressive 43% of *Transitions* participants opted to complete the survey online at the Portal, and we expect that number to increase in the second phase now that they are more familiar with the types of questions in the questionnaire and the longitudinal study as a whole.

II.5. The Surveying Process

By March, the online version of the survey was added to the Portal. LOTF had begun to compile a spreadsheet featuring participant information from the consent forms which they e-mailed to us on a weekly basis. In April, once the number of participants had reached approximately 150, e-mails were sent to all of the participants inviting them to fill out the online survey. The e-mail featured an invitation to fill out the first *Transitions* survey, a link to the Portal, and the participant's unique token ID number.

At this point, two problems came to our attention. First, it was discovered that many participants' e-mail addresses had been transcribed incorrectly on the spreadsheet created by LOTF. In many instances, other information was also inaccurate on the original spreadsheet, such as telephone numbers and mailing addresses. For this reason, we established our own database using the photocopies of signed consent forms. We were then able to update contact information as we communicated with each participant via e-mail or

telephone.

Another difficulty was that many participants did not receive the invitations for the online survey because their e-mail addresses identified it as 'Junk' and filtered it into their 'Junk Mail' folders. Although some participants filled out the survey after receiving the invitation, many either deleted it or did not receive it, so we ended up having to make follow-up calls to most of the participants after sending the Portal invitations. For the second phase, we will be contacting the students by e-mail or telephone beforehand, and if they prefer to do the second survey online, we will then send them the Portal invitation so that they will be expecting it and will recognise the message.

When it became apparent that not all participants were going to complete the survey on the Portal after receiving the invitation, we began to get in touch with each participant individually to ask them if they would prefer to do the survey over the telephone or online. If a participant preferred to do a telephone survey, it would often be done at that moment. If it happened to be an inconvenient time for them, we would make an appointment for a later date and time. On average, the telephone interviews took half an hour to complete, and they followed the same structure as the online survey. The responses were later entered into the online system by the interviewer utilising the participant's token ID number. If the participant wished to do the survey online, the interviewer would verify their e-mail address and send them a Portal invitation. The online surveys took participants 30 to 40 minutes to complete. During the surveying process, which lasted from April to July 2004, we conducted 119 telephone interviews and arranged for 91 online surveys.

We were also confronted with some administrative difficulties during the surveying stage. For example, not all consent forms that had been mailed to LOTF were signed and dated, so some had to be sent back to the participant and returned with a signature before they could complete an intake survey. Also, despite the fact that they had submitted their consent form a few months earlier, getting in touch with the participants did not always prove to be an easy task. In many cases, their contact information was no longer

current. This was mainly due to the fact that 45% of *Transitions* participants were still in school at the time the first survey was conducted, and it is not easy to get a hold of students during the summer months. The next round of surveys will be conducted in the Winter and Spring, which will likely be a better time to get a hold of participants, particularly those who are currently studying.

Besides completing surveys, another priority during this process was to renew participants' contact information using a more accurate spreadsheet. This process of renewing and updating participants' contact information will remain a priority for the life of the *Transitions* study. Participants have been provided with an e-mail address to alert us to changes in their contact information. Also, at the end of each annual survey they are asked to update this pertinent information. Hopefully, these efforts will facilitate continuous contact and decrease our attrition rate.

Of those participants who could be reached and agreed to submit an online survey, many of them were called repeatedly to ensure that they had received the Portal invitation, and to remind them to fill it out. In some cases, we would have to remind them a few times a week for up to a month before they completed the survey, which led to exasperation on both sides. There were also a number of participants who would not be home for an agreed upon scheduled telephone appointment. These problems were always resolved through painstaking contact attempts, but they caused the surveying process to continue much longer than originally anticipated.

Several participants who chose to complete the online version of the survey expressed frustration because the Portal had the tendency to crash while participants were in the middle of filling it out. Their information would not be saved when this occurred. After a few attempts, many of them requested to do the survey over the telephone, which helps to explain why more participants chose to do a telephone interview in the first phase of the study. Currently, the survey system is hosted on a dedicated, in-house web server that is under our full administrative control, providing reliable up-time and requiring no external maintenance or hosting costs, so this will not be a

problem in the future.

Two participants left the study during the first phase without completing the survey. One individual said that he did not know what he was agreeing to be a part of when he signed the consent form and he decided that he did not wish to be part of a longitudinal study. The other individual's parents had sent in his consent form on his behalf, and when contacted they later decided that he was not a good candidate for either filling out an online survey or doing a telephone survey.

By the self-imposed deadline of July 30th, 210 participants had completed the first questionnaire, now referred to as the *Transitions* intake survey. The study is fluid, so we will be accepting former pilot students to be a part of the study for its duration. Any students who were part of a pilot project from 1998 to 2002 are eligible to be a part of the study at any time. Once a new participant submits a consent form, they will fill out the Transitions intake survey.

In August, participants were mailed a card and a Chapters gift certificate to thank them for taking the time to complete the survey. The '*Transitions* Update' newsletter was also e-mailed to all pilot school contacts and participants informing them that the first interviewing stage had been completed and encouraging them to utilise the Portal on a regular basis. The quantitative and qualitative data generated from the surveys was exported to Microsoft Access, which allowed for advanced querying and statistical analysis. Interesting trends that were observed from the data were then compiled for this preliminary report from August until November, 2004.

II.6. Telephone versus Portal data

As mentioned, 91 participants (43%) opted to do the survey online and 119 participants (57%) completed the survey via the telephone. It is evident to us that more participants chose to do the survey over the telephone for one of four reasons:

▪ when asked to choose their preference during the initial telephone contact, many opted to complete the survey right away;

▪ when some participants attempted to do the survey online the server crashed and their answers were not saved;

▪ some participants found the online survey to be too long and overwhelming;

▪ for some participants, it was simply a matter of personal preference to speak to a person about their learning disability as opposed to doing a computer survey.

There does not seem to be a gender issue when it came to a preference for completing the survey online or over the telephone, because out of the 119 participants who had a telephone interview, 55% are female and 45% are male. Similarly, 56% of those who filled out a Portal survey are female and 44% are male.

In the next phase of the study, participants who opted to complete the survey online will be asked to do so again. Those who did the intake survey over the telephone will be encouraged to try the online survey now that the new server is in place in an effort to utilize the Portal as much as possible and to attract more users. An online survey also gives participants the flexibility to complete the survey whenever it is most convenient, and it means less data entry for the interviewers. Participants who opt to fill out the survey on the Portal are given the e-mail address of a Research Assistant should they have any questions about the survey or should they wish to elaborate on anything. Also, some participants who fill out the online survey at home request that a Research Assistant call them if they are having difficulty accessing the survey or proceeding with any of the questions. All in all, these methods of communication have assisted the participants with the Portal survey and the experience has been a very positive one thus far.

Another reason to try and direct most of the participants to the Portal is to regulate the answers to the survey questions – in other words, for consistency's sake. There was some difference in the information between the two venues. With telephone surveys, the participants tended to elaborate more when answering qualitative questions due to the conversational nature of the interview. A good example of when participants were particularly forthcoming over the telephone but not on the Portal was in answering the question: "What are your future work/career plans?" In telephone interviews, participants were usually very descriptive regarding their career goals. Typically, they talked about what they would like to achieve in the near and distant future and if they intended on pursuing further education to improve job prospects. However, in online surveys, participants were able to enter very ambiguous answers such as 'no comment', 'undecided', 'no idea', and so forth. In an effort to obtain more comprehensive qualitative information in the next phase, we have written more directed survey questions intended to get participants to expand upon short qualitative answers.

With the online surveying process, it was often more difficult to obtain qualitative information. By contrast, in phone interviews, the interviewer tended to offer more leading questions to the participant or in some cases offer clarification for questions, which resulted in more valuable qualitative information. We anticipate addressing the Portal's limitation in the surveying process for the second phase of the study. In addition to administering the annual *Transitions* surveys, we may contact specific groups of participants with very pointed follow-up questions after all the portal surveys have been completed as a way of clarifying qualitative data. This targeted follow-up process could also serve as a method for investigating trends with a select group of participants - i.e. under-employment or motivations for pursuing additional post-secondary education. The specific follow-up queries could be in the form of a few pointed survey questions on the Portal or, more likely, posed over the telephone.

Although a weakness of the Portal is that it does not generate substantial

qualitative information, it is likely that some individuals who are not usually inclined to participate in surveys due to shyness or introversion may have agreed to participate due to the anonymous nature of the Portal. Thus, Portal generated surveys may be considered a fair exchange relative to telephone surveys.

II.7. The Creation of the *Transitions* Longitudinal Study: A Short Step-by-Step Guide

The following is a synopsis of the steps we took in designing the study and assembling the data:

1. Decided upon a methodology. Specifically, we chose to administer a panel study and to use a longitudinal survey.
2. Established a pilot school contact within each pilot institution.
3. Pilot school contacts got in touch with all former pilot students and encouraged them to be a part of the study.
4. *Transitions* consent forms were mailed to former pilot students.
5. LOTF received the signed consent forms and inputted participants' contact information into an Excel spreadsheet to facilitate interviewing.
6. Completed a comprehensive Literature Review of longitudinal studies, some relating to adults with learning disabilities and others concerning the general population.
7. Developed an intake survey.
8. Consulted with students from the Paul Menton Centre for Students with Disabilities who reviewed the intake survey and offered their feedback.
9. Completed the intake survey, which was made up of 45 qualitative and quantitative questions.
10. Created a web-based Portal and uploaded the intake survey online.
11. Started to interview 210 participants via the telephone or through the LOTF Portal.
12. Updated participants' contact information throughout the surveying process.
13. Sent thank-you cards and gift certificates to participants.
14. Communicated with participants and pilot contacts by e-mailing a '*Transitions* Update' newsletter at the end of the first phase.
15. Compiled data from the responses to questions on the intake survey.
16. Imported data to a Microsoft Access database and established queries for the data.
17. Observed trends in the data that formed the basis of the final report.
18. Developed another survey for the second phase of the study featuring some new questions probing trends from the intake data.
19. Administered the intake survey to new participants and kept trying to attract more participants to the study.
20. Communicated with participants and pilot contacts via '*Transitions* Update' newsletter to inform them about the beginning of the second phase.
21. Set second phase of the study in motion.

III. LITERATURE REVIEW

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

Allen, Mary 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.

Highlights from the 2003-2004 Ontario University Graduate Survey. **Council of Ontario Universities.**

This executive summary done by the Council of Ontario Universities draws its information from the Labour Force survey of 2002 by Statistics Canada. This survey is designed to describe employment experiences, earnings and skills matches of students who graduated in 2001 from undergraduate university programs.

Two years after their 2001 graduation, 95.8% of graduates from undergraduate degree programs in the province of Ontario were employed compared with a rate of 93.6% six months after graduation. Their average annual earnings two years after graduation was $43,296.00 annually compared with $37,789.00 achieved six months after graduation. Two years after graduation, 85.3% of graduates were working either 'closely' or 'somewhat' related to their field of study, compared with 80.2% six months after graduation.

Provincial Overview of Survey Results Ontario. *Employment Profile: 2001-2002 College Graduates.* **Ministry of Training, Colleges and Universities. 2003.**

Of college graduates in Ontario, 57.8% were employed full-time in 2002 with 10.4% employed part-time and 10.2% unemployed. Of those employed part-time 43% say they could not find a full-time job, while 10.7% say working part-time is a personal choice. Forty-four percent of women report working part-time while only 39.7% of men work part-time.

Forty-seven percent of college graduates one year after graduation are employed full-time in a job related to their field of study, with the rate increasing to 51.8% two years after graduation and 61.5% three years after graduation.

The average starting salary one year after graduation is $26,680.00, increasing to $28,779.00 and $34,171.00 two and then three years after graduation.

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 WW2. 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.

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.

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.

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.

A note on *Transitions*: It is not the nature of longitudinal research to make claims or to announce finds on the basis of analysis of first year data. In the absence of a true control group with which to make valid comparisons, the strength of longitudinal research rests upon comparisons of the panel itself, from one year to the next. In this way, the data is strengthened and patterns or trends emerge progressively as the study matures over time.

Therefore, in this first annual *Transitions* report, we will present the quantitative and qualitative information painstakingly gathered, and for the most part, let the data speak for itself. Still, we will not be bystanders in the provision of analysis. Where trends seem to be emerging, we will call these ***Transitions* Trends**, bearing in mind that these trends are precarious at best, until extensive corroborating data can be added in the years to come.

As well, please note that *Transitions* Trends are not ranked in order of importance, but merely ordered according to how we wish to present information in this report.

IV. CURRENT IMPRESSIONS OF PILOT PROGRAMS

IV. 1. Level of Satisfaction with Pilot Programs

> **Transitions Trend #1**: *Participant's current level of satisfaction with LOTF's pilot programs remains high years later*

Transitions participants share one significant experience – they were all part of the LOTF pilot project between 1998 to 2002. We decided to ask them about their current impressions of the piloting experience several years after exiting their pilot program. In the intake survey, participants were asked to reflect upon their pilot experience and to rate their current level of satisfaction with the services they received with respect to their impact on five major areas: knowledge of their learning disability, self-confidence, accommodations, disclosure, and social interaction. The rating scale ranged from Completely Satisfied, Very Satisfied, and Fairly Well Satisfied to Somewhat Dissatisfied, Very Dissatisfied, and Not Applicable.

Overall, we found that former pilot students were quite positive with regard to their pilot experiences in all categories, though to a lesser degree regarding how the pilot program impacted on their social skills. The following details the results from each category:

1. Knowledge of learning disability

Participants were asked to rate their level of satisfaction with the knowledge they gained about their particular learning disability as a pilot student. One hundred and twenty-one participants (58%) responded that they are Completely Satisfied with the knowledge they obtained during the pilot years and 59 (49%) are Very Satisfied. Thus, an impressive percentage of participants (86%) responded positively to this inquiry.

2. Self-confidence/self-esteem

Participants were then asked to rate their present level of satisfaction with regard to how the pilot project influenced their self-esteem, and 94 (45%) responded with Completely Satisfied while 63 (30%) answered Very Satisfied. Once again, a large portion of participants (75%) felt that the pilot program had positively impacted them in terms of their confidence level.

3. Accommodation of their learning disability

Participants were asked to rate their current level of satisfaction with how the program impacted them regarding accommodations for their learning disability. One hundred and twenty-seven participants (60%) indicated that they are Completely Satisfied and 50 (24%) are Very Satisfied with how the program addressed accommodations. Overall, 177 participants (84%) feel that they received much assistance with respect to accommodations as a pilot student.

4. Disclosure of their learning disability

Participants were also asked to rate the help they received with disclosure of their learning disability, and 110 (52%) are Completely Satisfied and 53 (25%) rated themselves as Very Satisfied. Therefore, 163 participants (78%) think the assistance they received in learning how to disclose their learning disability to others was very good.

5. Social interaction/relationships

Participants were asked to indicate their current level of satisfaction with the services they received to assist with social interaction. In contrast to the previous four areas, participants responded to the impact of the pilot programs on relationships in a less positive manner. Seventy-nine participants (38%) are Completely Satisfied and 54 (26%) are Very

Satisfied, which means that 133 (63%) indicated a high level of satisfaction. This is somewhat lower than the previous four rated categories where over three-quarters of our population had a very positive response. Forty-seven participants (22%) responded that they are Fairly Well Satisfied, Somewhat Dissatisfied, or Very Dissatisfied with the services they received with respect to social relationships, and 30 (14%) responded with Not Applicable.

In part, this disparity may be explained by the fact that pilot programs did not include an explicit 'social' component. In the survey for the second phase, we are going to explore in more detail aspects of social interaction such as current living arrangements, especially for those participants who are currently living with their parents. We will also inquire more specifically into their current level of satisfaction with their relationships by dividing the broad term 'relationship' into three separate areas: friendships, family relations, and partner/spouse.

In next survey, we will not be asking further questions about their impressions of the pilot program for fear of being redundant. However, it would be interesting to ask participants in the final or 'exit' survey about their level of satisfaction with the pilot program with regard to the same five intake survey categories. It would also be interesting to see if the strong relationships between former pilot students and the staff at their pilot institutions have persisted five or ten years after the intake question was first posed.

IV.2.   Relationships   with   Staff   at   Pilot Institutions

Transitions Trend #2: *Relationships have endured with staff at former pilot institutions*

When asked if they are still in contact with former pilot staff, a considerable portion of *Transitions* participants, 136 (65%), said that they are, which speaks to the strong relationships formed throughout the pilot programs. These participants vary in their circumstances - some still attend their pilot institutions, some have graduated and, in some cases, live in different cities, provinces, or countries. For those participants who are still in school and in contact with the staff, this is to be expected because they still require accommodations and services. Yet, out of the 136 participants who are still in contact, 62 of them reported that they are not currently studying – that is 45% of those currently in contact who make an extra effort to keep in touch with the staff via e-mail, by telephone, or in person.

If they answered 'yes' to whether they still maintained contact with former pilot or staff in the Special Needs Office, participants were then asked to explain the nature of this contact. Most of them simply indicated the type and frequency of contact, such as by e-mail every month or by telephone every few months. Others elaborated more on the nature of the contact, and their reasons for still keeping in contact are diverse. Fourteen participants of the 136 still in contact with pilot staff (10%) maintained contact with the staff for employment help or general post-graduation advice. Ten participants of the 136 still in contact with pilot staff (7%) often follow up with pilot staff in order to get updates on programs and to see what is new for individuals with learning disabilities:

"I became really close to them so I often interact with them in a social setting and whenever I am going through a difficult time either in school or

in life, I will give them a call and ask for advice."

This statement speaks to the need for programs assist with the transition to the working world. It would be helpful to students with learning disabilities to have some kind of continuing network in order to discuss employment concerns and get advice, address their goals regarding further education, or discover new developments about accommodations or technology. This network is what the Portal was intended to be and will hopefully become in the future. Some participants spoke of the strong relationships they formed and the inspiration they gained from the pilot staff. Seven (5%) participants of the 136 still in contact with pilot staff mentioned that they became friends with the staff during the program and still have regular contact and 5 (4%) said that they have been contacted by their former pilot institution in the past to share experiences through speeches to perspective students or to write articles. Significantly, eight (6%) of this 136 participants are currently employed alongside the staff that once helped them as pilot students.

IV.3. Smooth transition between Pilot and post-Pilot services

In the intake survey, participants were also asked to give the duration of their time as a pilot student. Surprisingly, when asked when they were involved in the LOTF pilot project, many participants did not know the difference between pilot programs and ESF programs which shows the smoothness of the transition between the pilot years and the post-pilot years. Some participants listed the duration of their involvement with the pilot program as extending beyond the last pilot year – into 2003 and 2004, which would be ESF, not pilot projects. The fact that some participants saw little

interruption in the services they received after the pilot projects ceased is a testament to the Special Needs Offices and the Enhanced Services Fund. Yet, there are also some participants who saw a considerable difference between piloting and post-piloting years.

This data speaks to the importance of maintaining the ESF projects as specific, visible, and accessible services to students with learning disabilities, which should be evaluated regularly and for which the institutions are accountable.

IV.4. Continued use of supports from Pilot Program experience

For those participants who are currently studying, we asked if they are using accommodations, and, if so, are they essentially the same ones they used as a pilot student. Out of the 95 participants currently in school, 81 (96%) are registered as a student with a disability and are currently using accommodations. Out of the 81 participants who are currently using accommodations, 67 (83%) are essentially using the same accommodations as they used in the pilot project, such as extended time for tests or exams, textbooks or manuals on tape, and one-on-one support with learning strategist.

For example, many participants commented on the learning strategies and techniques they learned as a pilot student and still use. Others mentioned the value of being introduced to assistive technology in the pilot program. As one participant so eloquently expressed:

"The pilot project made it possible for me to have access to programs like

Kurzweil that really changed my educational experience. I feared and hated reading but this allowed me to learn from and enjoy my reading."

A small number *Transitions* participants are missing some aspect of support they received as a pilot student both professionally and personally. One participant mentioned that he still uses Assistive Technology and accommodations under ESF, however he laments that it is more difficult to get time with a learning strategist than it was as a pilot student.

Another participant who is currently employed full-time said that there were so many more accommodations that he had access to as a pilot student, and although he would love to use them now, he cannot afford them. Interestingly, 87 of all 210 participants (41%) - a mixture of participants who are still studying and as well as those who are not - are currently relying on supports they were introduced to in the pilot program.

IV.5. Direct credit to Pilot Programs where unsolicited

The intake data contains many unsolicited comments offering direct credit to pilot programs. In response to the survey question about how your learning disability affect you, one participant said:

 "I don't really have a problem with it - I'm pretty OK now. I learned from the program how to cope."

It is this kind of resilience that the services offered in the pilot programs were trying to stimulate.

Similarly, when asked to name their greatest success to date, numerous participants gave credit to the pilot programs for their accomplishments. The following are a few notable examples:

"My biggest success right now is graduating from college because I never thought I would be able to finish. I feel like I was so successful because of the pilot program."

"[My greatest success is] my relationships with co-workers and how I react to them. I am successful in this because the pilot program taught me how to communicate with others, specifically that people who talk to me can't tell that I have an LD."

V. Trends Related to Education

Definitions of terms to be used in the following sections:

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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 pursuer 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 PSE institution but has not yet graduated

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

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V. 1. Value of Education

> **Transitions Trend #3**: *Participants place a high value on post-secondary education*

➢ A significant number of participants are still currently studying

On the intake questionnaire, 95 of the 210 *Transitions* participants (45%) answered that they are still currently studying in 2004. This is surprising considering that the pilot projects ran from 1998 to 2002. Over two years after the pilot projects ended, almost half of the *Transitions* population have either not completed their program of study or have since returned to school after having graduated.

The high percentage of participants currently studying is also interesting because the average age of our population is 25.66. This point is not as remarkable, however, when compared to the education trends in the general population. Being in school or recently graduating at age 25 is not unusual for youth across Canada. In the year 2000, the median age at the time of graduation from a bachelor's degree or college diploma was 23, and 40% of the graduating class of 2000 was 25 or older (Allen and Vaillancourt "Class of 2000" p. 6).

Of the 95 participants who are currently studying, 65 (68%) are attending university, 29 (31%) are attending college and 1 participant (1%) is currently in a training program. Seventy-one (75%) of the participants who are in school are enrolled full-time and 24 (25%) are enrolled part-time.

The table on the following page features the fields of study and corresponding number of participants in each discipline:

Table #2

Fields of Study of *Transitions* Participants

Field of Study	# of *Transitions* participants
Social Sciences	36
Arts	16
Business	13
Sciences	6
Computers	5
Hospitality/Tourism	5
Engineering	3
Math	3
Healthcare	3
Architecture	2
Trade	2
Media	1

* One student's major is as yet undeclared

These figures are comparable to pilot statistics regarding fields of study, especially with respect to the most popular disciplines. Fifty-five percent of the participants currently studying are enrolled in social sciences or arts programs, which is comparable to LOTF pilot student profile.

> **Further education**

It is evident from the data that former pilot students are staying in school

longer or returning to school after graduating. A total of 23 (11%) participants of the 210 in our study returned to school after graduating from a training program, college, or university. This means that out of the 95 participants who are currently studying, 24% have already graduated.

Specifically, out of the 23 participants who are pursuing further education after having previously graduated, otherwise known as the PSE Graduate Continuers, 1 (4%) individual decided to do a training program after completing a diploma and 1 (4%) decided to pursue a diploma after completing a college certificate program. Six (26%) participants decided to pursue another diploma after completing their first diploma, and another 6 (26%) decided to pursue a degree after completing their diploma. Three (13%) individuals are pursuing a diploma after having completed a degree, and 6 (26%) are pursuing a second degree after completing their first degree.

Of those 6 PSE Graduate Continuers who are currently completing a second university degree, 2 are enrolled in a Bachelor of Education (B.Ed.) program and 2 are in graduate school. One participant is pursuing a bachelor's degree in another field, and one is taking extra courses in order to qualify for entry into a B.Ed. program.

The intake survey did not probe directly into the motivations these 23 PSE Graduate Continuers had in pursuing further education following graduation. Consequently, the survey for the second phase will pose this question with the following answers to choose from:

- to increase employment opportunities and obtain a better paying job
- love of education
- to specialise more in my field (e.g. Master's)
- I do not know what career to pursue
- school is a safe environment for me
- to obtain professional qualifications (e.g. B.Ed., L.L.B., Medical School)
- to shift career direction

Although our population's overall rate of returning to college or university is only 11%, this figure is significant. Bear in mind, many participants have not yet finished their original program, and given the time and effort it has taken many of our Graduate Continuers to complete their first program, 11% takes on new meaning. This trend is further reinforced by the fact that a high number of participants who are not currently studying anticipate they will return to school in the future.

The high value placed on post-secondary education by *Transitions* participants is also supported by their long-term goals. When asked about their future career goals, 26% of the 121 participants who are currently employed indicated that they plan to return to school at some point in the future. When the survey queried their life goals, 55 participants (26% of all participants, not only those who are currently employed) stated they have academic aims such as graduating, returning to school, or obtaining further qualifications.

The qualitative data indicates that out of all participants 9 (4%) had definite plans to return to school in September 2004. Here are the motivations for each of the 9 *potential* PSE Graduate Continuers:

- for a more in-depth study of Engineering

- obtain a rehabilitation therapy assistant diploma

- obtain a B.Ed.

- obtain a degree in order to have a better paying job

- become a social worker

- attend Chiropractic College

- obtain another college diploma relative to her degree

- obtain a Master's degree

- pass the English course he has failed a few times in the past in order to receive his diploma

Of these 9 participants who indicated plans to return to school in September 2004, 6 intended to return despite having already graduated: 1 from a college diploma program, 1 from a college certificate course, and 4 who received university degrees. The other 3 participants have not graduated in the past.

As well, from these 9 participants, 4 are currently employed and 5 are unemployed. It will be interesting to see how many students have returned to school when we embark on the second phase of the study, and, in particular, their specific motivations for doing so, which we will be asking them directly.

Another trend we will examine more closely in the second phase of the study is why *Transitions* participants are remaining in school for so long. For those who have still not yet graduated and are currently studying, the PSE Continuers, we will be asking them if they are completing the program they began as a pilot student. If so, PSE Continuers will be asked if this due is to financial reasons, difficulty deciding what career to pursue, love of education, or if more time is required to graduate on account of their learning disability.

If the PSE Continuers are not in the same program they started in and have not yet graduated, they will be asked why they decided to switch programs. All the PSE Continuers will be asked if they intend to pursue further education after graduation so that we can better grasp the trend of pursuing further post-secondary education.

In the next survey, all participants will be asked for a detailed educational history in addition to the targeted questions about motivations or circumstances related to returning or remaining in school. With an educational history for each participant, we will have the necessary quantitative data to be able to trace those who returned to school, how many programs they have graduated from, and so forth.

Does the fact that so many pilot students are still in school speak to poor employment opportunities, a need to take a longer period of time to complete a program, or a 'comfort zone' they do not wish to leave?

V.2. Graduation statistics for *Transitions* Participants

> **Graduation statistics by pilot institutions**

The following table features a list of the pilot institutions and their corresponding *Transitions* participants. As well, it illustrates the number and percentage of participants who have graduated from each pilot institution, and the percentage of all *Transitions* participants who have graduated.

Table #3   **Number of Graduates from each Pilot Institution**

Pilot institution	# of participants	*Transitions* participants	% of total graduates in *Transitions* study
Conestoga College	33	20 (61%)	17 %
University of Guelph	25	7 (28%)	7 %
York University	25	0*	
Trent University	25	11 (46%)	9 %
Canadore College	22	20 (91%)	17 %
Fanshawe College	21	12 (57%)	10 %
Loyalist College	17	14 (82%)	12 %
Georgian College	16	12 (75%)	10%
Cambrian College	15	7 (47%)	7 %
Nipissing University	11	9 (82%)	8%

* see page 71 for information on York University statistics

The previous table featured data on 112 of the 115 participants who have graduated because 3 of the former pilot students have graduated from institutions not involved with LOTF pilot project as follows: Sir Sanford Fleming College, Wilfrid Laurier University, and Seneca College.

Please note: Project Advance, the pilot program at York, only took place for six weeks during the summer. Former pilot students either completed the summer program and went on to study at another institution, or they are currently still studying at York. Therefore, twenty-two of the 25 *Transitions* participants from York are currently still studying. The majority of participants are pursuing a degree, with the exception of one former York pilot student who is attending college. Also, two participants from York have graduated, but from other institutions (the University of Guelph and Seneca College) and one participant is currently not studying and has not yet graduated. We do not know how many participants remained at York to take a degree, but we will know in the next study when we accumulate their educational histories.

In the future, we may investigate the York *Transitions* participants as a group using separate follow-up questions since York is the only former pilot institution that offered a pilot program during the summer months.

➢ **More college pilot students have graduated than university pilot students**

As illustrated in the table above, more college pilot students have graduated than university students have. Out of the 115 *Transitions* participants who have graduated, 27 (23%) received a university degree, 77 (67%) received a college diploma, and 11 (10%) completed a college certificate. The lower number of university graduates as compared with college graduates is likely because more colleges participated in the study than universities.

Still, when one compares the percentage of participants from the six college pilot institutions who have graduated (71%) with the percentage of participants from the four university pilot institutions who have graduated (31%), one wonders if this discrepancy is due to the fact that degree programs take longer to complete than diploma and certificate programs, or that former pilot students are having a more difficult time completing university studies. This question will be investigated in the second year survey.

Out of the 115 participants who graduated, only 91 provided us with the year in which they graduated. The results were as follows: 1 graduated in 1998, 3 graduated in 1999, 11 graduated in 2000, 10 graduated in 2001, 26 graduated in 2002, 24 graduated in 2003, and 16 graduated in 2004.

➢ **Pilot students who left school without graduating**

Twenty-two participants, 10% of all participants, have not graduated and are also not currently studying. For the purpose of this report, and in accordance with the terms from Statistics Canada, they will be known as PSE Leavers. Out of the 22 PSE Leavers who have neither graduated nor are studying, 18 of them attended a college post-secondary institution. Eleven of the former college pilot students who have not graduated and are

not currently studying are employed and 7 are unemployed. There are only 4 former university pilot students who have not graduated and are also not currently studying, and out of them 3 are employed and one is unemployed.

Ten of the PSE Leavers indicated on the intake survey their intent to return to complete their program of study or another program at some point in the future. Some of their reasons for leaving school without completing their program are as follows:

- could not pass required English course they needed to obtain diploma

- the financial burden of studying

- did not enjoy what they were studying

- participated in a summer pilot program and did not decide what post-secondary program to take until recently

Some questions will appear on next survey specifically for those who have neither graduated nor are currently studying. Principally, the PSE Leavers will be asked why they are no longer pursuing their program with the following options to chose from:

- did not enjoy what I was studying

- cannot decide what I want to do

- found employment and decided to leave school

- could not afford to pay for tuition, books, etc.

- could not pass all of the required courses to obtain degree/diploma/certificate

The PSE Leavers will also be asked if they plan on returning to school in the near future, and if so, when do they foresee returning and what do they plan to take.

V.3. Studying and coping with a learning disability

In formulating the objectives of the *Transitions* study, we assumed that more former pilot students would be working and therefore less would be in school. However, education remains just as significant as employment in the lives of our participants. This trend is most evident in the intake question that asked in what area of your life is your learning disability *most* affecting you. A surprising percentage of the total participants (74%) have continued to select education over employment or relationships. Only 11 (5%) of all participants indicated that their learning disability affects them *least* when it comes to school.

Similarly, when asked to list their three most significant challenges or obstacles, 109 (52%) participants listed academic difficulties. Also, 20% of all participants stated that their learning disability currently affects them academically when asked a very general, open-ended qualitative question on the subject, such as this participant:

"Whereas I could write some tests in high school in the classroom, due to the nature of university I must arrange with forms to write every single test and exam separately, planning well in advance how, where and when to do it. It is a real nightmare."

In spite of the fact that many *Transitions* participants still view school as a great challenge, those of our panel who are currently studying are doing well in terms of balancing school, work, volunteering, and co-op or internships. They are also utilising accommodations and supports to their full advantage.

➢ **Studying and accommodations/supports**

Of the 95 participants who are currently studying, 85 (89%) are registered as a student with a disability and 81 (96%) of those registered as a student with a disability are using accommodations. Some of the most common accommodations participants are presently using are listed below:

- Extended time for tests or exams
- Note-taking
- Private room for tests or exams
- Computer for tests or exams
- Use of assistive technology for tests or exams
- Other special conditions for tests or exams (e.g. use of a textbook or notes)
- Obtaining overheads used in class or the professor's lecture notes

Of the 95 participants who are currently studying, 54 (57%) are using assistive technology. Also, of the 81 participants who are currently studying *and* who are registered as a student with a disability and using accommodations, 67 (83%) say that they are essentially using the same accommodations they used in the pilot project:

"I used all of these things as a pilot student - I actually used many of the stress release techniques and ways of dealing with people in different situations while in the program. It was very beneficial!"

In terms of studying in a post-pilot environment, many *Transitions* participants are employing the supports and accommodations they became familiar with as pilot students with the help of ESF. Also, despite the fact that a large majority of them reported that education is the area in which their learning disability mostly affects them, this does not deter from the fact that 55% of all participants have graduated, 45% are currently studying, and

11% have returned to school after graduation. The intake data shows that our participants are continuing to meet their greatest challenge head-on, and they are achieving success.

V. 4. Studying and working concurrently

Like students in the general population, *Transitions* participants are successfully studying and working concurrently. All participants were asked to answer the question on the intake survey about combining work and school, even if they were not currently studying. From their responses we see that overall 119 (57%) participants have at one time held a job while studying. The average number of hours worked per week was 15.64 hours.

Of the 95 participants who are currently studying, both PSE Continuers and PSE Graduate Continuers, 38 (40%) are combining work and school. The general population data by Sandra Franke shows that between the ages of 20-24, 63% of male post-secondary students and 49% of female post-secondary students combine working and studying (Franke p. 10). Between the ages of 25-29, those numbers decrease to 11% of males and 12% of females. Franke's figures only include jobs these students held at the same time as attending classes, and did not include summer jobs these students may or may not have held during the course of their being students.

We have encountered problems with regard to a general population comparison with our *Transitions* data on employed students. The *Transitions* figure of 40% of participants currently combining work and study is lower than the general population figures. However, the intake survey was conducted in the summer of 2004, which changes the profile of those working and going to school.

When asked the questions, "Are you currently studying" and "Are you currently working," participants who were still students and who held summer jobs were inclined to answer 'yes' to currently working and state the number of hours and salary figures of their summer job. Therefore, when querying how many of our participants combine work and school, we cannot determine if the answer they gave to *current employment* was for their summer job or a job they held during the school year.

Due to our inability to properly query the data from the intake survey regarding current employment, we cannot currently estimate whether the figure of 40% of participants combining work and study would increase or decrease when student summer jobs are left out of the calculation. Therefore, we cannot properly estimate whether or not the figure of 40% is an accurate comparison with Franke's 63% of male and 49% of female post-secondary students combining work and school.

In order to avoid this problem of having participants enter summer jobs or volunteer work we have changed the question "Are you working while studying," on the second survey in two ways. First, we have separated the question, and it reads: "Are you working part-time *in a paid job while attending classes*?" and "Are you working full-time *in a paid job while attending classes*?" We will also quantify what we mean by full-time and part-time work; full-time work is 35 hours per week and up, while part-time work is considered less than 35 hours per week.

Despite the ambiguity of these questions on the intake survey, we can look at PSE Graduate Continuers and PSE Continuers separately to show what percentage of each are working and studying.

➢ **PSE Graduate Continuers**

Six college graduates and 5 university graduates are continuing their education while working. These employed students make up 9% of the 121 *Transitions* participants who are currently employed. Six of these PSE Graduate Continuers are earning annual salaries of less than $20,000.00 annually. We cannot properly assess if this could be considered under-employment due to our inability to understand whether the salary figures are for annual work or summer employment. (For a definition of under-employment, turn to page 86).

What is notable is that 5 of these PSE Graduate Continuers are earning salaries between $20,000.00 - $34,999.00 annually. Most notable is the one college student who is earning between $50,000.00 - $64,999.00 annually. Again, we cannot assess the type of work he/she is doing though we can say that all of these salaries are quite high for working students.

In order to probe further the motivation of these PSE Graduate Continuers to return to post-secondary, the second phase of the survey has included the question: "If you have graduated and are currently studying, why did you choose to return to school?" We hope this question will shed some light on the motivations of our PSE Graduate Continuers. Is returning to school primarily related to a desire for advancement within the current field, or do graduates return to school to make a shift in career direction?

➢ **PSE Continuers**

Of the 38 *Transitions* participants who currently combine work and school, 27 have not yet graduated. Again, though these participants indicate that they combine work and study, we cannot assess whether or not they are working while attending classes, or working during the summer. At this moment a lack of accurate data leaves us unable to compare our working

PSE Continuers with the general population.

In addition to working during the school year, we asked participants about their summer job experiences. At some point, one hundred and sixty-four of 210 participants (78%) have worked during the summer while they were students, 114 had full-time summer jobs, and 50 had part-time summer jobs.

Transitions Trend #4: *Transitions participants combine post-secondary education and work reasonably well, even as they pursue career avenues*

- Co-op Work

In the intake data, we noted the prevalence of co-op placements or equivalent among the *Transitions* students. Seventy-one participants, 34% of 210 participants, had a co-op placement, practicum, or internship while in school at some point. On average, this co-op placement or equivalent was 1.22 years. The choice of a co-op placement while in school indicates *Transitions* participants have actively planned for the transition into the labour force.

Twenty-nine students who are currently studying (PSE Graduate Continuers and PSE Continuers) also have a co-op placement associated with school. Nine of these students, when asked if they are currently employed checked 'yes' and indicated a salary associated with their co-op placement. Of these students, 8 were earning a salary of less than $20,000 annually, while one was earning in the $20,000 - $34,999 salary range.[*]

Co-op placements are designed to allow students to get relevant job experience at the same time as studying. Co-op students work in their field for up to four months at a time while attending one class, instead of taking a full course load. Therefore, co-op students are excluded from a consideration of students who combine paid-work and class attendance,

since a very small number of weekly hours are dedicated to course work.

Co-op placements are nearly always directly related to the students' field of study, whereas a student who has to search for a part-time job during school may gain work experience, but unlikely in a related field. The choice, therefore, of a co-op placement indicates that *Transitions* participants are seriously considering employment in their field of study and thus gaining relevant work experience.

It should also be noted that co-op positions at the university level are generally only given to students with an A- average or above, indicating that *Transitions* participants with co-op placements are also excelling in their studies.

The second phase survey will look more closely at co-op to ascertain more how much relevant work experience former pilot students are obtaining. We will ask if participants chose co-op to obtain relevant work experience, for financial reasons, to try out a job in their field of study, or because co-op is required for their program.

- **Volunteer work**

Ninety-one participants, 43% of all participants, have done various types of volunteer work while studying: i.e. working with children, working with Special Needs Office/Disability, working with a club or organisation, working with persons who are physically or mentally disabled.

In the next survey, we will also ask how many participants who are currently employed also do volunteer work in order to better gage how all participants utilise their spare time.

V.5. Living Arrangements

> **Transitions Trend #5**: *A high percentage of Transitions participants are living with their parents*

In the section of the intake questionnaire devoted to social life, all participants were asked to identify their current living arrangements, and the data revealed a surprising trend. One hundred and two (49%) participants replied that they were presently living with their parents. In terms of living arrangements, this was by far an overwhelming majority.

The participants' living current arrangements are as follows:

- With parents: 49%
- With friends: 14%
- With spouse or partner: 13%
- With family members other than parents or spouse: 9%
- Alone: 8%
- In residence: 2%
- With roommates who are not friends: 2%
- Renting a room in a house: 2%
- In a group home: 1%

After inquiring about their current living arrangements, we decided to ask participants what living arrangement they consider to be *ideal*, and the results certainly did not correlate with the data regarding current living arrangements:

- With parents: 17%
- With friends: 16%
- With spouse or partner: 23%

- With family members other than parents or spouses: 3%

- Alone: 30%

- In residence: 4%

- Unsure: 7%

Interestingly, only 35 (17%) participants responded that their ideal living arrangement is with their parents and *all* of those who did choose this option are currently living with their parents. Three-quarters of those who are both living with their parents and consider it to be ideal explained that it made sense financially. Occasionally, participants' reasons were mixed, for example:

"Right now living with my parents is ideal because of my finances and my health - I don't know what I would do without them because I have recently had a few surgeries and they have helped a lot."

That 49% or almost half of *Transitions* participants are presently living with their parents seems high given that the average age of our participants is 25.66. Still, this figure is in keeping with the general population figures for student living arrangements, where 59% of students live with their parents. However, our figure is higher than the general population for the number who still live with their parents and have recently entered the workforce, where only 36% continue to live with their parents (Franke p. 14).

Why are so many former pilot students still living at home when only 17% say living with their parents is an ideal living arrangement? Do students with learning disabilities live at home longer because of a greater dependence on parents growing up, since we know successful students with learning disabilities (those who make it in post-secondary education) tend to have a have high level of parental involvement. Or is this trend related to unemployment, under-employment or to high student debt?

In the second survey we will probe deeper into this trend. If participants are

living at home, we are asking them to chose the reason out of four options, and then to elaborate with a qualitative answer:

- financial reasons
- cultural reasons
- dependence upon parents
- preferred living arrangement

It is valid to assume that the trends related to living arrangements are invariably interconnected with those concerning employment and education, in particular the high percentage of our population who are currently still living with their parents. Issues such as unemployment, under-employment, and salary ranges will be discussed in the subsequent section.

VI. 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 marked 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, 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. At the provincial level, the 2003-2004 Ontario University Graduate Survey and the 2001-2002 Ontario College Graduate Survey are the most recent inter-institutional reports on the transition from school to work.

VI.1. Salary and *Transitions* participants

The LOTF pilot programs helped students develop the necessary skills to ease the transition from post-secondary studies into the labour force. The *Transitions* intake survey included fifteen questions related to work experience, eight of which addressed all participants' employment status and seven that were answered only by those who are currently employed. We found that of 210 participants, 121 (58%) were employed as of July 31, 2004. The following points offer some highlights of our data regarding employment:

- combine work and school: 38 (18%)

- are no longer in school and employed full-time: 66 (31%)

- are no longer in school and employed part-time: 17 (8%)

▪ are no longer in school and unemployed: 31 (15%)

When discussing the salary of *Transitions* participants we have chosen to focus mainly on those participants working full-time and not studying, PSE Graduate Non-Continuers and PSE Leavers, because they have made the full transition to the workplace. This population makes up 31% of currently employed *Transitions* participants. The chart below highlights the earnings of this population.

Table #4   **Salary Ranges for Participants no Longer Studying**

Annual Salary Range *full-time*	Number (#)	Percentage (%)
< $20,000.00	14	21%
$20,000 - $34,999.00	32	48.5%
$35,000 - $49,999.00	15	23%
$50,000 - $64,999.00	5	7.5%
$65,000 - $89,000.00	0	0
Total:	66	100%

As demonstrated above, 48.5% of *Transitions* participants employed full-time are earning in the $20,000.00 - $34,999.00 salary range. When compared with the general population, however, this figure, though broad, is slightly lower than the average annual salaries of working youth in the general population.

The median gross annual earnings of full-time PSE Graduate Non-Continuers across Canada two years after graduation were $35,000.00 annually. The median gross annual earnings of all *Transitions* graduates employed full-time falls in the $20,000.00 - $34,999.00 salary range. Due to the broad range of this figure it is important for us to query whether it would

be fair to say that the *Transitions* population is under-employed when compared with the general population.

➢ **Why consider under-employment?**

Under-employment of our participants could be one of the strongest indicators that students with learning disabilities are having difficulty making the transition from school to work.

The functional definition we are using for under-employment is "employed at a lower salary than your education and work experience warrants." Upon graduation, many PSE Graduate Non-Continuers do not have a significant amount of work experience, and thus starting salaries are often entirely based on the type of degree attained. In Ontario in 2001, the average starting salaries six months after university graduation (for all degree programs) was $37,789.00 annually and six months after college graduation (for all diploma programs) was $31,046.00 annually (*Employment Profile: 2001-2002 College Graduates, Highlights from the 2003-2004 Ontario University Graduate Survey*).

Under-employment also has two distinct components, which may be linked, but need not be. There is the issue of salary. But there is also the issue of remaining at an entry-level position with little or no responsibility and with limited or no promotion prospects. For many people, the latter is as important or perhaps even more so, than the salary range. We do believe, however, that assessing the under-employment of *Transitions* participants by looking at salary ranges and comparing them with the general population is useful in the absence of a control group. Also it will be useful to compare current salary patterns exhibited at this time with trends noticed in future reports.

➢ **Assessing the Possible Under-Employment of *Transitions***
Participants

On the first *Transitions* survey, participants were asked to indicate their annual gross salary from the following six options:

- Less than $20,000.00
- $20,000.00 - $34,999.00
- $35,000.00 - $49,999.00
- $50,000.00 - $64,999.00
- $65,000.00 - $89,999.00
- Over $90,000.00

Despite the fact that 48.5% of full-time employed *Transitions* participants fall in the $20,000.00 - $34,999.00 annual salary range, 21% in the less than $20,000.00 range for full-time work is quite high. As the 25th percentile of the general population of college graduates earns $24,000.00 annually and the 25th percentile of university graduates earns $31,000.00 annually, it seems important to consider why 21% of our population is below the 25th percentile of the general population (Allen "Class of 2000" 31).

Assessing the employment success of participants proved difficult because the above salary figures represent too broad a range, particularly the figure of $20,000.00 - $34,999.00 annually. Within that category, a university graduate (depending on field of study) earning $28,000.00 – $34,999.00 would not be considered under-employed, whereas one earning $20,000.00 – $24,000.00 would be, with a grey area for the figures in-between. As college graduates often earn less than university graduates do, the under-employment figures would be different there as well but difficult to analyse within such a broad range of figures.

As an accurate assessment of unemployment within the $20,000.00 -

$34,999.00 salary range was not possible due to the broad range of that salary figure, we have tightened the annual-earnings question on the next survey about salary ranges. We have reduced the range of earnings to $5,000.00 increments (i.e. $20,000.00 - $24, 999.00). We believe this will allow us to better assess whether or not our graduates are under-employed, though the initial results do point to that being the case.

> **Transitions Trend #6**: *Transitions participants have lower salaries than the general population, and may be experiencing under-employment*

The table on the following page details the annual salaries of *Transitions* participants who are no longer studying and who are employed full-time.

Table #5

Full-Time Salaries of *Transitions* Participants

Annual Salary	Univ. Grads	%	College Grads (diploma)	%	College Graduates	%	P S E Leavers	%
< $20,000.00	3	25%	8	20%	0	0	3	27%
$20,000 - $34,999	5	42%	20	49%	1	50%	6	55%
$35,000 - $49,999	3	25%	9	22%	1	50%	2	18%
$50,000 - $64,999	1	8%	4	9%	0	0	0	0
$65,000 - $89,999	0	0	0	0	0	0	0	0
Total full-time:	12	100%	41	100%	2	100%	11	100%

It is evident from this table that most participants who work full-time, no matter the type of educational qualification, earn annual salaries in the $20,000.00 - $34,999.00 range.

VI.2. PSE Leavers

Though Canada has the highest rate of post-secondary attainment in the world (Allen "YITS" 6), PSE Leavers are quite common in the general population. Between 2000-2002, 15% of youth age 20-22 that attended post-secondary had left their studies without completing their program. PSE Leavers are most likely males; 17% of males left their post-secondary program compared with 13% of females (Allen "YITS" pp. 6-9).

> **Transitions Trend #7:** *Transitions participants have a higher than average retention rate in post-secondary education than in the general population*

That only 22 (10%) of all *Transitions* participants left their programs of study without finishing indicates that the *Transitions* population has a lower post-secondary attrition rate than the general population. However, unlike the general population, 59% of the 22 *Transitions* PSE Leavers were female, and 41% male.[*]

Eleven PSE Leavers are currently employed full-time. These PSE Leavers account for 17% of the 66 *Transitions* participants who are no longer studying and are currently employed full-time.

See the table on the following page for the annual salaries of *Transitions* PSE Leavers.

Table #6   **Annual Salary of PSE Leavers Employed Full-Time**

Annual Salary full-time PSE Leavers	Male	%	Female	%	Total	%
< $20,000.00	0	0	3	27%	3	27%
$20,000 - $34,999	3	27%	3	27%	6	54%
$35,000 - $49,999	1	9%	1	9%	2	18%
$50,000 - $64,999	0	0	0	0	0	0
$65,000 - $89,000	0	0	0	0	0	0
Total full-time PSE leavers:	4	36%	7	63%	11	100%

 * three PSE Leavers are employed part-time: one male and two females. All three are earning less than $20,000.00 annually but are not included in the salary calculations

Eight (36%) of the 22 PSE Leavers are unemployed. This high unemployment rate of PSE Leavers may not be cause for immediate alarm, as many Leavers may have left post-secondary to pursue volunteer work, to travel or to help with family.

The motivations of PSE Leavers will be probed in subsequent surveys. We have asked the following questions in the second survey: "Why did you leave your program without graduating?" and "Do you plan on returning to school in the near future?"

We hope that these two questions will shed some light on the motivations of PSE Leavers.

Of those who did not graduate and who are now employed full-time (11 PSE Leavers), 27% are earning less than $20,000.00 annually and 54% are earning between $20,000.00 - $34,999.00. In addition, 18% are earning between $35,000.00 - 49,999.00 annually. When compared with the annual salary range for all participants who are in the workforce full-time we see little variation between PSE Leavers and PSE Graduate Non-Continuers.

Of university graduates only 15%, and of college graduates only 14%, are living in the salary range between $35,000 - 49,999.00 and the similarity here is important to take into account. The success of PSE Leavers may indicate one of two things. First is the possibility that these Leavers left post-secondary to pursue immediate career opportunities and have been quite successful. Second is the possibility that those who have graduated from post-secondary institutions may not be hitting career/employment highs relative to the degrees and diplomas they received. Could something be hindering *Transitions* PSE Graduates?

VI.3. PSE Graduate Non-Continuer Statistics

Thirteen percent of all *Transitions* participants surveyed have graduated from university, thirty-six percent of all participants graduated with college diplomas, and five percent of all participants graduated with college certificates.

As detailed in the chart below, 19 university graduates and 73 college graduates are no longer pursuing any sort of post-secondary schooling. However, though the majority of graduates did not return to post-secondary, only 55 (48%) of the 115 *Transitions* PSE Graduate Non-Continuers are currently employed full-time.

Table #7   **Status of PSE Graduates**

Transitions PSE Grads	Univ.	%	Coll. dip.	%	Coll. Cert.	%	Total All Inst.	%
In school:	9	32%	13	17%	1	9%	23	20%
Full-time:	12	43%	41	54%	2	18%	55	48%
Part-time:	2	7%	10	13%	2	18%	14	12%
Unemployed:	5	18%	12	15%	6	55%	23	20%
Total Grads:	28	100%	76	100%	11	100%	115	100%

VI.3. PSE Graduate Non-Continuer Statistics

We believe it is the salaries of PSE Graduate Non-Continuers working full-time that may turn out to be a very good initial indicator of the success of *Transitions* participants in the workplace. Twenty percent of college graduates and 25% of university graduates who work full-time currently are under-employed when their annual salaries are compared with the general population.

Table #8   **Annual Salaries of PSE Graduate Non-Continuers**

Annual Salary full-time	Uni. Grads.	%	Coll. Grads. Dip.	%	Coll. Grads Cert.	%
< $20,000.00	3	25%	8	20%	0	0
$20,000 - $34,999	5	42%	20	49%	1	50%
$35,000 - $49,999	3	25%	9	22%	1	50%
$50,000 - $64,999	1	8%	4	9%	0	0
$65,000 - $89,999	0	0	0	0	0	0
Total Full Time:	12	100%	41	100%	2	100%

In order to analyse PSE Graduate Non-Continuers properly, this group has been divided into three categories:

- University versus College Graduates

- Field of Study

- Gender

➢ **University Graduates**:

In the general population, college and bachelor graduates were equally likely to find work. However, bachelor graduates generally have higher earnings.

The median earnings of bachelor graduates two years after graduation from the general population across Canada was $39,000.00 (Allen "Class of 2000" p. 12).

As is demonstrated on the chart below, 42% of the 12 *Transitions* University graduates employed full-time are earning in the $20,000-$34,999.00 annual salary range, while 25% are earning less than $20,000.00 annually.

Table #9   **Salary of Full-Time University Graduates**

Annual Salary full-time	University Graduates	%
< $20,000	3	25%
$20,000 - $34,999	5	42%
$35,000 - $49,999	3	25%
$50,000 - $64,999	1	8%
$65,000 - $89,999	0	0
Total Full Time:	12	100%

Our population of university graduates is definitely below the national

median of annual earnings of university graduates in the general population. Provincially, the 2003-2004 Ontario University Graduate Survey shows that six months after graduation the average annual salary of graduates from undergraduate degree programs in 2001 was $37,789.00 annually and after two years was $43,296.00 annually (*2003-2004 OUGS*).

It is also important to note that 25% of our graduates are definitely below the national 25th percentile of the general population, which rests at $31,000.00 annually for bachelor graduates two years after graduation (Allen "Class of 2000" 31).

Also, as there is a problem with the broad range of the salary figure of $20,000.00 - $34,999.00 annually, it is important for us to point out that many graduates who fall in this salary range may also be earning salaries that are under the 25th percentile of the general population.

Two important factors that we cannot yet account for may play a large role in why the salaries of *Transitions* university graduates are so low. The first is that, of our university graduates, 36% (6) graduated in 2004, the summer they were surveyed and 16% (3) graduated in 2003. As we are comparing their salary rates with those of the general population after two years, the fact that 60% of our graduates are not yet earning higher salaries may have much to do with just entering the workforce. Still, when compared provincially with the general population six months after graduation we see that *Transitions* university graduates continue to be under-employed. However, the figures in the 2003-2004 Ontario University Graduate Survey are for graduates from 2001 and unemployment has been on the rise since 2000 (Allen "Class of 2000" p. 6).

The second factor that may account for why *Transitions* university graduates' annual salaries are so low may be the field of study that they chose to pursue. Field of study will be analysed after first looking at the salary rates of College Graduates.

➢ **College Graduates**

While the median earnings of bachelor graduates in the general population two years after graduation across Canada was $39,000.00 annually, the median earning for someone with a college degree in the general population was $31,200.00 (Allen "Class of 2000" p. 12).

As demonstrated in the chart below, 20% of the 43 *Transitions* college graduates employed full-time demonstrate extremely low rates of pay, and one-half are earning in the $20,000.00 - $34,999.00 salary range.

Table #10   **Annual Salary Full-Time College Graduates**

Annual Salary Full-time	College Grads (diploma)	%	College Grads (certificate)	%
< $20,000.00	8	20%	0	0
$20,000 - $34,999	20	49%	1	50%
$35,000 - $49,999	9	22%	1	50%
$50,000 - $64,999	4	9%	0	0
$65,000 - $89,999	0	0	0	0
Total full-time:	41	100%	2	100%

Like our university graduates, *Transitions* college graduates are well below the National median annual earnings of college graduates in the general population. Provincially, the 2001-2002 Provincial Overview of Survey Results of Ontario college students shows that the average annual salary of a college graduate employed in a full-time job related to their field of study is $31,040.00. Though the survey shows that 87.2% of college graduates are employed, only 73% are employed full-time and of those employed full-

time, only 54% are employed in a related field.

In this case, though the survey criteria for the Provincial and National surveys regarding college graduates' salaries were different, the reported earnings were remarkably close: $31,200.00 as the median earnings for the national study and $31,040.00 for the average earnings in the Provincial study.

It is interesting to note that the National 25th percentile of college graduates in the general population are earning $24,000.00 annually, which falls directly in the middle of the *Transitions* intake survey's $20,000-$34,999.00 salary figure (Allen "Class of 2000" p. 31).

Again for college students, there is a problem with the broadness of the salary range of $20,000.00 - $34,999.00 annually. Whereas for university students, it is likely that the *Transitions* population was still earning *under* the 25th percentile of the general population, for college students, many may be earning *in* the range of the 25th percentile. We would need to know more accurately where our populations' salaries fall, which is why the salary ranges have been reduced to $5,000.00 increments for the second survey.

The type of degree achieved appeared to influence our participants' annual salaries, however not in the manner we assumed based on the employment statistics for the general population.

In the general population, university graduates are paid, on average, $4,000.00 - $8,000.00 more than college graduates are (Allen "Class of 2000" p. 13). However, our survey results reveal that both full-time and part-time *Transitions* university graduates have higher rates of both under-employment and unemployment than *Transitions* college graduates do.

It is important to note that this trend may not remain true over time in the workforce; typically university graduates have more upward mobility in the

workplace than college graduates do. It is also important to caution that in the analysis of cohort sub-sections, sample sizes can become quite small, and as a consequence it becomes difficult to extrapolate results. This trend will be substantiated or invalidated over time.

That college students with diplomas are faring better in the workplace may indicate they have received better, or more applicable training than university graduates, with a higher number of college graduates working full-time in the higher salary ranges.

Transitions Trend #9: *Field of study likely influences low salaries of Transitions participants*

Salaries and Fields of Study

What may seem like the under-employment of PSE Graduate Non-Continuer *Transitions* participants may have much to do with the fact that the majority of students who participated in the study were in the Arts and Social Sciences.

The average salary six months after graduation of a student with a university Bachelor of Arts degree working full-time in Ontario in 2003–2004 was approximately $32,249.00 and for a college general arts graduate it was approximately $27,237.00 annually. The average salary of graduates from the Social and Behavioural Sciences working in Ontario was between $26,000.00 - $28,000.00 for college graduates and $35,000.00 for bachelor graduates.

By comparison, the average salary for an architecture or engineering graduate was $51,540.00 for bachelor students and $38,000.00 for college graduates (*OUGS* and *2001-2002 College Graduates*).

The fact that 42% of *Transitions* university graduates and 50% of *Transitions* college graduates employed full-time were earning between $20,000.00 - $34,999.00 annually is more in keeping with the average salaries from the field of Arts and Social Sciences, especially for college graduates.

The difficulty of finding jobs in these fields without pursuing further education may also contribute to the number of those earning less than $20,000.00 and the high number who are deciding to go back to school (3 university graduates and 14 college graduates).

▪ A high number of *Transitions* participants who are employed full-time are working in their field of study

On the intake survey, *Transitions* participants were asked to answer the question: *Does your current employment match with your program of post-secondary study and career aspirations?* Of the 66 participants currently employed full-time, 40 (60%) answered "yes" indicating that they are employed in their field of study and that their employment matches their career aspirations, while 26 (39%) answered "no" indicating they are not working in their field of study nor currently meeting their career goals.

Of those who were not working in their field of study, the most common career aspiration was to be employed in their field of study (28%). This is followed closely by participants who wish to go back to school to obtain further qualifications or do another program (25%) and participants who wish to move up in their current company to have more responsibility and more money (21%). As one participant, employed as a customer service representative, commented:

"I continue to look in the Environmental field for employment, but because I have not been employed in the environmental field and because I have been

out of school for so long, I fear that I may not find suitable work in accordance with my education. I have even tried to get involved in volunteer work in the environmental field, but even that has turned up nothing. In the mean time, I plan to strive for excellence in my current position and look for opportunities within the company for advancement."

➢ **Gender**

Transitions Trend #10: *Transitions female graduates are more likely to be under-employed than males*

The gender split of *Transitions* participants could end up being significant when trying to assess whether our graduate population is under-employed.

Women in the general population make significantly less money annually than men do – usually between $4,000.00 - $8,000.00 less. Men overall experience a 19% probability of low pay, while women experience a 34% probability. Women are also least likely to experience upward mobility in the workplace (Janz. "Low-paid employment" p. 15).

Of the 12 university graduates who are working full-time, 8 (67%) are women and 4 (33%) are men. Of the 42 college graduates with diplomas who are working full-time, 27 (63%) are women while 15 (35%) are men. One hundred percent of full-time employed college students who graduated with certificates are men.

What we can see from the charts on the following two pages is that female graduates are more likely to be under-employed than their male counterparts. Eighteen percent of the female graduates who are employed full-time are significantly under-employed. Thirty-one percent of all female graduates working full-time and 22% of all male graduates working full-time fall in the $20,000.00 - $34,999.00 salary range, and also qualify as possibly being under-employed.

Table #11a

Annual Salary of Female Graduates Employed Full-time

Annual Salary Female **Full-time**	University	%	College (diploma)	%	College (certificate)	%	Total Inst.	Total %
<$20,000	3	25%	7	16%	0	0	10	18%
$20,000-$34,000	2	17%	15	35%	0	0	17	31%
$35,000-$49,000	3	25%	3	7%	0	0	6	11%
$50,000-$64,999	0		2	5%	0	0	2	3%
$65,000-$89,999	0		0	0	0	0	0	0
Total full-time Graduates (M+F)	12	67%	42	63%	0	0	54	63%

Table #11b

Annual Salary of Male Graduates Employed Full-Time

Annual Salary **Males full-time**	University	%	College (diploma)	%	College (certificate)	%	Total Inst.	%
<$20,000	0	0	1	2%	0	0	1	2%
$20,000-$34,000	3	25%	8	19%	1	50%	12	22%
$35,000-$49,000	0	0	5	12%	1	50%	6	11%
$50,000-$64,999	1	8%	1	2%	0	0	2	3%
$65,000-$89,999	0	0	0	0	0	0	0	0
Total full-time Graduates (M+F)	12	33%	42	35%	2	100%	54	38%

- University

The median annual salary of a female university graduate in the general population working full-time is $37,000.00 annually, whereas the median salary for a male university graduate working full-time is $42,000.00 (Allen "Class of 2000" p. 31).

Twenty-five percent of *Transitions* female university graduates are earning in the same salary range as the median female university graduate. There are no male *Transitions* university graduates earning in the $35,000.00 - $49,999.00 salary range, though 8% have exceeded the general population figure and are earning between $50,000.00 – $64,999.00 annually.

Twenty-five percent of male *Transitions* university graduates and 17% of female *Transitions* university graduates are earning in the $20,000.00 - $34,999.00 salary range which is below the norm for the general population in both sexes. However, when field of study is taken into account as is the broad range of the $20,000.00 - $34,000.00 salary range, it is reasonably safe to count only those earning less than $20,000.00 annually as under-employed, until more accurate salary numbers can be collected in the next round of surveying. On this basis, male graduates still fare much better, with no male university graduates earning less than $20,000.00 annually and 25% of women doing so.

- College

The median annual salary of a female college graduate in the general population working full-time is $28,600.00 annually, whereas a male college graduate's full time median annual salary is $35,000.00 (Allen "Class of 2000" p. 31). Seven percent of females with college diplomas are earning the equivalent of the general population, while 19% of males with college diplomas and 50% with college certificates are earning in the $35,000.00 - $49,000.00 salary ranges.

However, 12% of males with college diplomas are earning between $20,000 – 34,999 annually, as are 50% with college certificates, and due to field of study and the broad salary range of the $20,000.00 - $34,999.00, the under-employment of college graduates for now is being measured at less than $20,000.00 annually. On this basis, men are doing significantly better: 2% under-employed versus 16% of female college graduates.

- Gender and Unemployment/Under-employment

Table #12   **Unemployment by Gender**

Unemployment PSE Graduate Non-Continuers	Uni.	% /19	Coll. dip	% /63	Coll. Cert.	% /10	Total Inst.	% /92
Female	1	5%	4	6%	2	20%	7	8%
Male	4	21%	8	13%	4	40%	16	17%
Total:	5	26%	12	19%	6	60%	23	25%

* The unemployment rate on this chart is taken from all PSE Graduate Non-Continuers (including those who work part-time. University part-time, 3, College Diploma part-time, 10, College Certificate part-time, 2). Overall unemployment rate for PSE Graduate Non-Continuers is 25%, while overall unemployment rate of all participants is 15%.

A glance at male and female PSE Graduate Non-Continuers reveals that very high percentages of male university graduates are unemployed, at a rate of 21%, compared with only 5% of female university graduates who are unemployed.

However, there are *no under-employed* male university graduates, whereas 25% of female university graduates are under-employed.

Six percent of women who graduated with college diplomas and 20% of women who graduated with college certificates are unemployed. This is

compared with 13% of males who graduated with college diplomas and 40% of men who graduated with college certificates who are unemployed.

However, just as with the university graduates, 16% of females with college diplomas are *under-employed*, compared with 2% of males.

Why are male PSE Graduate Non-Continuers not likely to be under-employed?

▪ Do Male *Transitions* graduates experience more of a problem with the transition to the workplace than female graduates?

Seventeen percent of all male *Transitions* PSE Graduate Non-Continuers are unemployed, compared with only 8% of all female post-secondary graduates. Why is there a higher unemployment rate for men?

In the general population of PSE Graduate Non-Continuers, the unemployment rate is higher for men than for women – but the figures are significantly lower than in the *Transitions* population.

In the general population, 9% of male post-secondary graduates are unemployed versus 6% of female post-secondary graduates (Allen "Class of 2000" p. 2).

What could account for a 17% unemployment rate of male *Transitions* PSE Graduate Non-Continuers compared with 8% of female *Transitions* participants?

Is it fair to say that due to these rates being so high, the *Transitions* male population is encountering difficulties in the transition from school to work? The sample size is this sub-section is too small to extrapolate definitive

results, so we will observe this trend in subsequent surveys.

Despite the variable of field of study, what is especially important to remember is that in the general population, university graduates have better employment statistics and higher starting wages than those with college diplomas do.

However, in the *Transitions* population, 50% of college students are earning between $20,000.00 - $34,999.00, versus only 42% of university graduates earning in that salary range.

Why are *Transitions* university graduates who are not continuing in school not maximising their potential the way it appears college graduates are when salary is analysed? Are they less prepared for the work environment?

VI.4. Unemployment of *Transitions* participants

Table #13   ***Transitions* Unemployment Rate**

Unemployment	Uni	%	All. Coll.	%	PSE Leavers	%	Total All part.	% /210
Female	1	.5%	6	3%	4	2%	11	5%
Male	4	2%	12	6%	4	2%	20	10%
Total:	5	2.4%	18	9%	8	4%	31	**15%**

* Unemployment percentages on this chart are calculated out of all 210 *Transitions* participants.

When the unemployment rate of all *Transitions* participants is sought, it is revealed that 15% of *Transitions* participants are unemployed.

In the general population, 90% of both college and university graduates are employed, with an unemployment rate of 7% (Allen "Class of 2000" 28). The figures for the *Transitions* PSE Graduate Non-Continuer and PSE Leaver population are significantly higher – leading us to believe many graduates/leavers are experiencing difficulty with the school-to-work transition.

Unemployment figures for PSE Graduate Non-Continuers and PSE Leavers:

- 26% of university graduates
- 16% of graduates with college diplomas
- 60% of graduates with college certificates
- 36% of PSE Leavers

The responses of these participants are varied when asked about their future career goals. Four University Graduate Non-Continuers who are currently unemployed are planning to return to school and one University Leaver is planning on returning. Only one College PSE Graduate Non-Continuer who is currently unemployed plans on returning to school, though four College PSE Leavers say they plan on returning.

Of the 66 participants who are no longer in school and are employed, 15% say they are inconsistently employed (working two or three part time jobs). One participant commented:

"I have been working a bunch of odd jobs I can never keep – working at a donut shop or Shoppers Drugmart, 'gofer' jobs in offices etc."

Four percent of all participants in unsolicited comments regarding employment stated that they considered themselves under-employed. One participant commented that he is:

"Working full-time at the store I was employed at while going to school. This job is not really aligned with what I studied and there is no room for growth. I feel that I am under-employed and I am thinking of going back to school in a little while."

When another participant was asked what he considered to be his current challenges, he answered:

"Not liking my job because I am under-employed - I am dissatisfied at work because I know there is no room to go further."

Unemployment may have much to do with an inability to find work in one's field of study or frustration at being under-employed.

Three percent of the 31 participants who are currently unemployed had jobs after graduation but are now unemployed. Two percent of those who are unemployed are currently seeking compensation or a disability pension.

Six percent of all participants surveyed say they have no future work/career plans right now. However, the overwhelming majority of participants are actively job planning and preparing for the future.

VII. General Trends Related to Learning Disability

VII.1. Overall population is a high functioning cohort of individuals

In the intake survey, participants were asked to explain how their learning disability currently affects them. This was a qualitative question that yielded a diverse set of answers. We looked closely at the data generated from the question and discovered that there is a set of common answers or trends that we have grouped together as follows. Briefly, here is how the participants responded:

- Not currently affected: 20 (20%)

- Affected in specific ways: 177 (84%)

- Greatly affected: 13 (6%)

In their answers, *Transitions* participants indicated one of the three different levels listed above for how their learning disability currently impacts upon their lives. Twenty participants (10%) reported that they are currently not affected very much by their learning disability. One encouraging comment from a student read:

"I feel like my LD is almost non-existent because I have developed tools to allow me to get my work done with virtually no trouble."

One hundred and seventy-seven participants (84%) say that they are currently affected in some specific ways by their learning disability, which they went on to list. For instance, one student's learning disability affects her motor skills, which means that it takes her a little longer to fully complete a task, which she must plan for. The majority of participants fell into this category, but it is interesting that like the previous example, it was typical for them to refer to how their learning disability affects them and,

without being asked, describe how they cope with it. In contrast, 13 participants (6%) consider themselves greatly affected by their learning disability:

"It affects me in every aspect of my life. I am scared to go and get my driver's license, I can't fill out a job application on my own, and I buy the wrong thing at the grocery store because I can't read the labels."

A few participants answered that they are currently not affected by their learning disability. For example, some participants are doing manual labour and therefore their reading and writing abilities are not challenged as they were when they were a student.

Transitions Trend #13: *Generally, former pilot students are functioning well, since 94% consider themselves to be coping well and not greatly affected by their learning disability.*

We also looked at the qualitative data for the same question ('Please explain how your learning disability currently affects you') from another angle by examining what in particular was currently affecting them.

Forty-two participants (20%) mentioned that their learning disability currently affects them mostly in terms of employment. One participant commented:

"At work I am challenged all the time and all forms of comprehension, spelling, and communication is difficult. I know what I want to say/write but it's hard to get it across to co-workers sometimes"

Interestingly, almost the same number of participants, 41 (20%), find that their learning disability affects them mostly academically. One student said that due to her learning disability, it is more difficult for her to achieve her

goals and reach her full potential because she cannot get accepted into graduate school or Teacher's College.

Only 23 participants (11%) reported that their learning disability affects them mostly in relationships:

"It is hard for me to pick up on clues in social situations. I find it hard to associate with other people, especially when they are different from what I'm used to."

The numbers and percentages indicated above are not evenly balanced – some participants would explain being affected in both school and social relationships, for instance, and their answer would have bearing on both of those categories. This analysis was meant to highlight specific challenges generated from open-ended questions. By simply asking participants to describe in their own words how their learning disability currently affects them, we collected a large amount of qualitative data.

In the next survey, we will ask a direct question about what areas their learning disability most and least affects them. Over the course of the *Transitions* longitudinal study, it will be interesting to see how perspectives change with regard to this question as situations and priorities change and fewer participants are studying and more are working.

VII.2. Areas of greatest difficulty: Education and Employment

In addition to the qualitative question discussed above, participants were also asked to indicate in what area of their lives their learning disability most and least affects them in a forced-answer quantitative question. They were given three areas – education, work, and relationships – asked to choose one. It is fascinating that although 95 (45%) participants are currently still studying, 155 (74%) responded that education continues to be the area in which they are most affected. Forty-one participants (19%) said that work is the area that is most affected while only 14 (7%) chose relationships. Alternately, when asked to identify in what area of their lives their learning disability least affects them, 11 participants (5%) chose education, 46 (22%) work, and 153 (73%) specified relationships as the area that is least influenced. Education was a considerably greater preoccupation despite the fact the over half of the panel is not currently studying. It is valid to assume that participants who may be considering further education are struggling in some way with the prospect of returning to school.

> ***Transitions Trend #14:*** *Academic and Employment issues continue to be obstacles for Transitions participants but less so than for the pre-pilot population*

➢ **Challenges**

The participants were asked to list their three most significant current challenges or obstacles. The following analysis is based on the 630 responses to this question in the data gathered from the intake survey. Participants were allowed to list as many responses as they felt were appropriate.

When querying the data in response to the most significant current challenges or obstacles, it was discovered that 42% of the answers referred to issues of self-esteem, self-image, and navigating through the world with a

disability that is not visible in general. One participant expressed her particular obstacle in this manner:

"Being perceived as stupid - I struggle with that notion myself all the time. I know I'm not stupid but when others perceive you that way it's hard not to think that way yourself."

Almost half (42%) of the challenges that were listed are LD-related, which illustrates that the stigma attached to individuals with learning disabilities is still evident.

Thirty-four percent of the challenges were related specifically to two of our main priorities in the *Transitions* study, for education and employment and how they are impacted upon by their learning disability held equal weight when participants were asked to relate their current obstacles. Seventeen percent of the challenges related to work: difficulty in presenting at work, job-hunting, trying to find a working environment where there are distractions and noise, and communicating to co-workers, to name a few.

The following are some comments about obstacles some participants are facing in the employment world:

"Trying to find a position which I find challenging but at the same time do not have to do work where my learning disability will limit me."
"Writing resumes and filling out forms is a challenge which is a hindrance to getting a job"

Similarly, 17% of the data was occupied by academic-related difficulties like memorising the material for courses, professors not always understanding that learning disabilities require accommodations, having to work harder than one's peers in order to achieve the same result, and so forth.

In addition to the general and employment and education-related challenges,

there were also less substantial challenges listed that are still worth mentioning. Seven percent of the answers related to social obstacles such as fear of being in large groups of people or not understanding what is happening in social situations. Six percent of the answers were about financial challenges, particularly debt. Accordingly, in the next survey, we are asking a question about how debt affects their lives. We are interested to find out if some participants feel they are hindered by student debt and if this financial concern impacts on their social, employment, and education goals. Health and family challenges each comprised 2% of the 630 responses.

There are several participants who reported that they currently have no challenges -- 8% -- they have no challenges related to their learning disability at this time and they did not realise that the question encompassed all obstacles in their lives. In the survey that has been designed for the second phase, we will specifically name challenges/obstacles related to their learning disability. We do not want the question to be worded in such general terms because although financial and health challenges are relevant, we want to know how they are coping as an individual with a learning disability in their post-pilot program life.

In the question which asked about how their learning disability currently affects them, the data is quite similar to that generated from listing their three most significant challenges or obstacles. In the responses to the former question, employment figured in 20% of answers as did education and relationships came in at 11%. Likewise, in terms of their current challenges or obstacles, 17% of the answers related to employment, 17% to education, and 7% to social interaction. Therefore, it turns out that the qualitative data produced by both the open-ended question as well as the more specific one about challenges and obstacles yielded more or less the same picture of our population in terms related to education, employment, and social life.

➢ **Supports**

The participants were asked to list their three most significant supports and, similar to the data regarding challenges and obstacles above, the following is based on the 630 responses to this question in the database. What participants are utilizing at this time in terms of supports is listed as follows (in order of importance):

▪ Parents

▪ Technology

▪ Staff and services at the Special Needs Office at their current or former institution.

There were some other supports mentioned in response to this intake question, but these were by far the most prevalent.

It is evident from the data that *Transitions* participants rely heavily on assistance from family members (especially parents), friends, partners, and co-workers, because a considerable 63% of the responses listed one of these as current supports, and family was by far the most common support.

The second most popular supports relate to students who are currently studying, as 44% of the data pointed to accommodations through the Special Needs Office at their institution - note-taking, extended time for tests, and so on. Also, 29% of answers referred to assistance from professionals – Learning Strategists, Employment Advisors, Disability Counselors, and psychiatrists - as a significant current support. Thirty percent of responses mentioned Assistive Technology as an important current support – Dragonspeak, Kurzweil, Blackberry, Franklin Language Master, or Inspiration software. An additional 53% of the responses pointed to types of supports like the Internet, spell-check, electronic equipment such as a calculator, tape recorder, PDA, etc. Assistance from the Special Needs Office and Enhanced Services Program was well represented in the

population of former pilot students.

Among the less frequently mentioned supports were learning and thinking strategies acquired over time as well as self-taught coping strategies; 14% of the answers alluded to one of these. Three percent of the answers listed financial aid as an important current support, 3% referred to an agenda or day planner, and 1% of the answers cited medication. Only 1% of the answers about current supports said that participants presently require no supports.

In the second survey, in order to avoid answers to the question about supports that were plentiful in the intake data like mom, dad, boyfriend, girlfriend, etc. we are asking participants to list specifically the supports they use at this time which are directly *related to their learning disability*. We would like to get a better idea of the more concrete, tangible supports they are currently using for their learning disability so we can really see what former pilot students are relying upon - especially in the workplace. In a subsequent survey, we also plan ask how many participants currently utilize a support group or are affiliated with the Learning Disabilities Association of Ontario (LDAO) in order to better judge what kind of information they would find helpful on the Portal.

VII.3. Self-advocacy and Resiliency

It is one of the goals of the *Transitions* study to inform persons with learning disabilities about themselves, particularly their continuing obstacles and successes, in order to assist them to make positive decisions as they move further away from their piloting and post-secondary years. Put simply, many of the questions on the intake survey were intended to assess how former LOTF pilot students are currently functioning in their lives in

general, and to gauge their level of resiliency. With respect to resiliency, we are using the following working definition in applying the term to our findings.

Resiliency is defined as the competencies and abilities that some people possess which enable them to cope in the face of significant adversity or risk. Those who are resilient are able to use both internal and external factors and circumstances to adjust to the demands of their environment and, in turn, to adapt their environment to their unalterable innate needs. Resiliency is demonstrated through the individual's ability to change and to deal effectively with changing circumstances. Such protective factors are instinctive for some people, including those who have quite severe disabilities or who have to function in very difficult circumstances. Many other people do not possess such innate protective factors. If they have disabilities or are required to deal with major life challenges, they often give up or turn to inappropriate solutions such as drugs, alcohol, or even suicide.

However, it is important to note that resiliency can be taught to people. Some of the pilot institutions utilised approaches such as Gerber's reframing, the Learning and Employment Assessment Profile (LEAP), as well as other methods, as a way of introducing pilot students to the components of resiliency.

➢ Greatest Successes

If one of the goals of the *Transitions* study is to assess how former LOTF pilot students are currently functioning in their lives, then a indicator of resilience is to ask participants about the nature of their greatest successes to date. The following points give an overview of the participants' answers:

- Academic successes: 47%
- Employment-related successes: 27%

- Personal successes (i.e. gaining independence): 17%
- Strong interpersonal relationships: 10%
- No successes to report at this time: 5%

In response to this inquiry, some participants answered with more than one success, which accounts for there being more than 210 answers in the following categories. The majority of participants, 47%, shared academic successes. Most of these successes involved attending or graduating from university or college, particularly for those who were informed in the past that post-secondary education would not be attainable due to their learning disability.

Twenty-seven percent of participants related employment-related successes. For example, many participants who are currently working in the fields of education or recreation stated that in working with children with learning disabilities, they are able to be compassionate and patient due to the fact that they have been in a similar position before. For some, simply working in their field was a great achievement. Seventeen percent of the greatest successes were quite personal in nature and often related to coming to know oneself better, gaining independence or self-confidence, or as this participant related, helping others through volunteer work to return the assistance that was given to them as a pilot student:

"I pioneered a program that strives to ease the transition from high school to university for LD students through pairing individuals up with students in upper years with LD's."

Ten percent of participants listed accomplishments related to positive social interaction such as strong relationships that have been nurtured and developed over time. Lastly, a small percentage of participants, 5%, claimed they have no success to speak of at this time:

"I am successful at failure. I am successful at this because the skills I lack,

reading writing and understanding, are the school skills that are valued in today society."

Judging from their answers with respect to current successes, despite a few negative responses, our panel appears to be generally well adjusted.

➢ **Life Goals**

That the *Transitions* population is well adjusted also seems to be the case in examining their life goals, with the exception of what we have termed 'social' goals. Keeping in mind that most participants offered several answers in response to the question about their life goals, the following will provide a brief overview of the main aspirations of our panel:

- Career-oriented goals: 74%
- Academic goals: 26%
- Social goals (i.e. getting married, having children): 24%
- Financial goals: 23%
- To lead a well-balanced life: 7%
- Travel: 7%
- Currently figuring out life goals: 9%

Seventy-four percent of participants listed a career-oriented goal such as obtaining a job, or moving higher up in the company. Twenty-six percent mentioned academic goals like graduating, returning to school, or obtaining further qualifications. That academics are a key goal is in tune with our finding that further education is a high priority with our panel. This trend is to be explored in much more detail in the second phase's survey.

We grouped such goals as getting married, having children, or working on

relationships as social goals, and 24% of participants referred to these as future objectives. Although this is still a good portion of our population, one might think it would be a higher priority considering the average age of our population. There are obviously a number of participants with employment and education-related goals but not yet social goals, which is why probing social life is extremely relevant to our study.

Twenty-three percent listed financial goals, such as acquiring material possessions like a house or a car, being rich, or getting out of debt accumulated from student loans. Seven percent aspire to have a well-balanced life or to simply be happy, 7% would like to travel or have more leisure time, and 9% said they are currently figuring out which goals to pursue.

VII.4. Impact of learning disability on Social Life

In order to get a general idea about their social life, we asked *Transitions* participants how they choose to spend their free time. In general, 69 (33%) participants choose to spend their free time alone while 141 (67%) participants choose to spend their free time with others.

These are the most popular leisure time activities:

- Hobbies: 84%
- Arts: 16%
- Sports/exercise: 57%
- Clubs: 10%
- Religious groups: 7%

There was an 'other' option which accompanied spare time activities listed above, and in that choice 5 (2%) participants mentioned that they volunteer during their free time, 9 (4%) chat or surf online, 14 (7%) relax or sleep, 6 (3%) do chores or errands, 4 (2%) catch up on work, and 16 (8%) spend time with friends and family. Since they were able to write anything in the 'other' category and only some chose to do so, this list is certainly not comprehensive.

When asked about where they met their friends, participants were once again able to check off as many options as applied to their life. That 47% of participants reported meeting their friends in childhood indicates that they are capable of sustaining long-term relationships. Here are the results from the forced-answer question:

- Childhood: 47%

- Elementary and High school: 64%

- Post-secondary institution: 61%

- Current neighbourhood: 22%

- At work: 18%

Once again, through the 'other' option, their answers regarding where they met their friends yielded some results that differed from the directed answers choices featured on the intake survey. They are as follows: 4 (2%) met friends online, 10 (5%) through clubs/ organizations, 6 (3%) at church, 3 (1%) through volunteering, 6 (3%) through sports/ exercise, 15 (7%) through other friends, family members, boyfriends or girlfriends.

Transitions Trend #15: Participants appear to be resilient about their social relationships, though this is an area of some concern

➢ **Negative feelings related to LD and social life**

As the following will demonstrate, there are some links between poor social relationships

and learning disabilities in the intake data.

- LD affecting social interaction

When asked to explain how their learning disability currently affects them, 23 (11%) of

former pilot students referred to relationship problems, such as a difficulty communicating in social situations or not feeling as though they fit in with other people. A few comments generated in response to the question will illustrate this trend:

"I usually don't talk, just listen, so relationships are hard. I live in constant fear of being misjudged or of not being taken seriously."

"It is hard for me to pick up on clues in social situations. I find it hard to associate with other people, especially when they are different from what I'm used to."

Likewise, when asked to list their three most significant challenges or obstacles, 21% of the answers alluded to relationships or social interaction. For example, one participant mentioned feeling insecure in their relationships, another referred to being uncomfortable in large groups of people, and meeting and keeping new friends is also an obstacle for some participants.

- Disclosure of learning disability and relationships

Two hundred and two, 96% of all participants have disclosed that they have a learning disability to family and friends, and 8, 4% of all participants have opted for selective sharing, such as this participant:

"Family knows but friends do not - I don't want them to know. My character

won't be looked at the same way. Why should I tell people openly I have an inferior trait?"

- Level of satisfaction with friendships and relationships seems low overall

Participants were asked to rate their current level of satisfaction with friendships and relationships, and their responses were as follows[*]:

- Very satisfied: 30%
- Satisfied: 44%
- Somewhat satisfied: 19%
- Not satisfied: 5%
- Very dissatisfied: 2%

It may be a high figure that 26% of participants are dissatisfied in some way with friendships and relationships at this time. Still, the question may have been too general by incorporating all relationships while only one area of their social life might be negative. One also has to consider the age average age of our cohort. Relationships tend to be relatively transitory and even troubled during these years due to shifting priorities, education and career pressures. Though some of our participants do not express a high level of satisfaction with regard to relationships, it would be difficult to attribute this to having a learning disability with the information we currently have. In the second phase survey, specific questions regarding their level of satisfaction will be posed with respect to three social categories - relationships with spouses or boyfriend/girlfriends, family members and friends – and using the same scale.

- Social interaction and work

One must keep in mind that since all participants were required to answer questions related to social interaction and work, regardless if they were

currently employed or not, the results are somewhat skewed.

Regardless of whether or not they were currently employed, all participants were asked if they have made friends at work. It can be assumed that those who answered and were not currently employed used a working environment from the past. One hundred and fifty four, 73% of all participants said they have made friends at work, while 16, 8% of all participants reported they have not made friends at work. A further 40, 19% of all participants, responded with 'No answer'- this is either because they have not or they are uncomfortable with the question. Out of the 16 participants who have not made friends at work, three indicated that their learning disability was the reason for this hesitation:

"Because of my LD, I will not approach people, I will just wait for people to come to me."

One hundred and ninety-six, 93% of all participants, view their relationship with their co-workers as comfortable, which is encouraging. The 14, 7% of all participants, who stated that they do not have a comfortable working relationship with their colleagues offered such reasons as having nothing in common with co-workers, working alone most of the time, or some attributed difficulties to their personality or learning disability.

"Working with others is emotionally horrible for me."

One hundred and twenty-three, 59% of all participants, said that they see their colleagues outside of work. Out of those who interact with their co-workers socially, 60 participants mentioned that this occurs occasionally, and 63 participants said it happens fairly often.

We will examine learning disability in the workplace in more detail in the following section.

➢ **Positive feelings related to LD and social life**

Overall, the current effect of their learning disability on relationships is low judging from

the intake question posed regarding what area of their lives their learning disability most affects them, as only 14, 7% of all participants, responded that their learning disability most affects them socially. One hundred and fifty three, 73% of all participants, indicated that relationships are an area of their lives where they are least affected. Accordingly, when asked to name his greatest successes, one participant responded:

"My great interpersonal relationships. I am successful because I have good communication skills, good self-esteem and a healthy self-image".

This comment is an indication that despite some obstacles in terms of social life, many pilot students are doing well in the area of social interaction.

VI.5. Impact of learning disability on Employment

➢ **Disclosure at work**

We have chosen to separate the general employment data about the *Transitions* population from the comments made by all participants about LD in the workplace. Specifically, difficulties related to learning disability in the workplace might shed some light on the reason so many participants are under-employed. However, at this early stage it is difficult to determine if a causal relationship exists.

All participants, whether they are currently employed or not, were required to answer questions related to disability in the workplace. Those who are not currently employed were asked to answer the questions related to their previous employment experience. We have included information from all participants, but as well included specific information about those who are currently employed.

Only 64 participants of all 210, or 30%, have disclosed that they have a learning disability at work. This general number seems low over-all, however disclosure is not necessary in some types of employment.

However, 35 of the 66 participants who are currently employed full-time, 53%, have disclosed that they have a learning disability at work. Out of these 35 participants, 26 who revealed they have a learning disability at work have done so with a positive result. One participant commented:

"The result is that I am able to hand in reports via the Internet or type on the computer instead of by hand. People don't treat me any differently other than that."

However, 9 participants who are currently employed full-time have disclosed that they have a learning disability and have done so with a negative result.

Thirty-one (47%) of participants employed full-time have not disclosed that they have a learning disability at work.

Interestingly, more female *Transitions* participants have disclosed that they have a learning disability at work. Twenty-five female participants currently employed have disclosed that they have a disability in the workplace; 4 work part-time and the rest are full-time workers. Eleven men currently employed have disclosed that they have a learning disability at work, only one of whom is employed part-time.

The trend of non-disclosure is not solely for participants currently employed full-time. Forty-seven of the 121 participants who are currently employed, or 39%, have not disclosed that they have a learning disability at work and 23 of those participants who have not disclosed have done so for a negative reason. One participant commented:

"I don't want people to know I have a disability. Telling them won't help them or me in any way. Making exceptions for me at work will make me feel left out."

However, 44 of all currently employed participants who have not disclosed having a learning disability at work have done so for positive reasons - reasons that demonstrate resilience, independence and self-confidence. One participant said:

"It never comes up, it's not very relevant, and I don't want to use my disability as a crutch." Another said: "It doesn't affect my ability to work so I haven't told them. If it did, I would."

That the majority of those who have disclosed they have a disability at work have had a positive result is indicative of a positive employer response to employees with learning disabilities. It is also indicative of participants who are making a successful transition from school to work, whether or not they are earning in the expected salary range. As we cannot yet draw any correlation in our data between learning disabilities and low salary, that disclosure has been well received is an excellent measure of the success of the participants.

➢ **Accommodations at work**

> **Transitions Trend #16:** *Overall, Transitions participants have chosen careers that build on their areas of strength and interest*

Out of the 121 participants who are currently employed, 48 (40%) are using accommodations at work. The most common accommodations used at work are as follows:

▪ Assistive technology

▪ Computer

▪ Personal spell-check (either a portable one or a field-related one such as a medical spell-check)

▪ Extra time to work on projects or to complete tests in training, etc.

A former pilot student who works in the field of communications and must attend frequent training sessions offered a good example of the last accommodation:

"When I do tests in training, I get extra time. I bring any forms I have to fill out home so I can have the quiet I need."

Seven male PSE Graduate Non-Continuers who are employed are using accommodations at work. These men are all working full-time and all earning salaries of $20,000.00 - $34,999.00 annually or above. Eleven female PSE Graduate Non-Continuers are using accommodations at work. Two of these women work part-time, earning less than $20,000.00 annually, but 11 work full-time, all earning in the $20,000.00 - $34,999.00 salary range or above, with only one working full time and earning less than $20,000.00 annually. These figures seem to indicate that these PSE Graduate Continuers have successfully made the transition from school to work utilising their accommodations.

Still, the majority of participants do not use accommodations in the workplace. Sixty percent of employed participants are not using accommodations. Some common answers for why accommodations are not being used are that accommodations are not necessary for the job, or they just take a little more time to complete a task at work. One participant said that he has his own little strategies he has developed to cope at work, which demonstrates resilience.

Some participants commented that they could not afford the accommodations they used in the pilot program or that they have asked for accommodations but have not been provided with any. One participant responded:

"I wish I had the accommodations at work right now that I had at Fanshawe. I really miss the support and I find that things take me an extra long time to do without the supports I had in school."

In the survey that has been designed for the second phase, we will probe deeper into disclosure and requests for accommodations at work.

➢ **Areas of strength and difficulty**

Another possible indicator of a successful school-to-work transition of our participants is the number who say their current employment builds on their areas of strength and interest. A participant may not be earning a high salary, but be very satisfied with his/her career choice. As many of our participants received arts and social science degrees, a positive measure of a successful transition may not be dependent upon salary, due to low salaries in most fields related to arts degrees, but upon workplace satisfaction.

> **Transitions Trend #17:** *Participants disclose their learning disability at work only when necessary for the job*

Seventy percent of participants revealed that their current employment builds upon their areas of strength and interest, while 46% say they are able to avoid their area of greatest difficulty at work. The two are not the same, as many participants who enjoy their work still encounter disability-related difficulties. We must caution that in this instance the sample size is too small to make reliable conclusions.

One participant whose employment both builds on an area of strength and avoids areas of greatest difficulty says:

"I'm teaching oral English to young children with practically no print so I think I've chosen the perfect job!"

Eighty percent of female PSE Graduate Non-Continuers say that their employment builds on their areas of strength and interest, while only 66.7% of male Graduate Non-Continuers agree. What could be the reason for this difference?

In regard to encountering or avoiding areas of greatest difficulty in the workplace, it seems as though more females are employed in a job in their area of greatest difficulty than males. Employed PSE Graduate Non-Continuers of both sexes are often unable to avoid their areas of greatest difficulty in the workplace. Forty-two percent of working male graduates claim their work does not allow them to avoid their areas of greatest difficulty,

while 58% of working female graduates agree. Sixty-seven percent of female PSE Leavers who are working say their work does not avoid their area of greatest difficulty, while 20% of male PSE Leavers agree. Would it be possible to say that women are more willing to accept jobs in their area of difficulty then men?

This becomes interesting when one looks at the PSE Graduate Non-Continuers with the highest salaries. One hundred percent of women earning between $50,000.00 - $64,000.00 annually say their work *does not* avoid their area of difficulty, while 100% of males earning in the same salary range say their work *does* avoid their area of greatest difficulty. Forty-three percent of women earning less than $20,000.00 annually *do not* avoid their area of greatest difficulty, while 100% of males in that salary range *do* avoid their area of greatest difficulty in their work.

These figures even out for the average salary range of *Transitions* participants. Fifty-five percent of women and 54% of men earning between $20,000.00 - $34,999.00 annually *do not* avoid their area of greatest difficulty at work.

Again, in the $35,000.00 - $49,999.00 salary range, more women *do not* avoid their area of greatest difficulty in their work (86%) while only 50% of males work in their area of greatest difficulty.

Part-time work does not seem to influence these figures very much, though it is interesting to note that more women than men who are working part-time are still working in their problem area. The only men who are working part-time (two at less than $20,000.00 and one at $20,000.00 - $34,999.00) do claim that their work *avoids* their area of greatest difficulty. Forty percent of women graduates working part-time and earning less than $20,000.00 annually *do not* avoid their difficulty area, and 22% of women working part time in the $20,000.00 - $34,999.00 range also experience great difficulty in their work.

It is possible that since only seven female PSE Graduate Non-Continuers are unemployed, as opposed to 16 males, that, generally, male graduates are less willing to take a job that features prominently their area of greatest difficulty?

VIII. FUTURE APPLICATIONS OF TRANSITIONS DATA

Given the complexity and significant resources required to create and sustain a longitudinal study, it is important to consider its research relevance, with particular attention paid to potential future applications. Over the next decade, as the *Transitions* Trends become substantiated and thus transformed into reliable findings, we believe that the information generated from our population will be invaluable to current emerging educational themes, especially in the Province of Ontario. By following a panel of former pilot students for a full ten years, we will see discernible patterns and outcomes, which could influence both future post-secondary programming and government training programs.

The recently released Rae Review on post-secondary education confirmed a series of system-wide gaps in purpose, effectiveness, accountability, and successful student outcomes. In addition to the concerns about funding, these gaps are ascribed to the fact that 'if you don't know where you are going, any road will take you there', or, in other words, there exists a marked absence of research-based goals. It was similar concerns related to students with learning disabilities and their educational opportunities that led to the establishment of the Learning Opportunities Task Force in 1997.

The continuing feedback obtained from

the former pilot students will assist the Ministry of Training Colleges and Universities to ensure that future legislation is based on a research supported set of goals for all students in Ontario attending post-secondary institutions. In particular, the Rae Review has as one of its mandates to provide accountability for student services. It intends to accomplish this goal by collecting benchmark data on key aspects of post-secondary education by establishing a Council on Higher Education. The *Transitions* data could provide the Council on Higher Education with a valuable set of feedback on areas of vital importance in student services, particularly the disability services. *Transitions* findings will complement data collected in the NSSE/CCSSE surveys so that institutions can start planning to make improvements based on evidence gleaned directly from students learning experiences. The Rae Review states that currently there are gaps in knowledge about the post-secondary system. The *Transitions* data is therefore timely, as it addresses the needs of an individual group that may otherwise be looked over by the NSSE/CCSSE.

The Rae Review particularly highlights the need for students with disabilities to have access to dedicated staff resources at career centres to help these students obtain

employment information that is geared towards their individual needs. Just as LOTF participated in the formation of the Rae Review, the *Transitions* data as it is accumulated could aid the recently established Minister's Post-Secondary Advisory Committee on Disability Issues. The mandate of this committee is to identify the best practices at the particular institutions for the benefit of students with disabilities, especially concerning transition into and beyond post-secondary. After taking into consideration the recommendations of the LOTF final report, this committee could also take into consideration the emerging *Transitions* data where it is institutionally specific. The 10 pilot institutions, through participating in the LOTF pilot projects, have provided very specific supports to their students, and the different career avenues explored by pilot participants may indicate to this advisory committee what supports need to be implemented in all institutions province-wide.

In particular, the unique perspective of our maturing cohort should directly assist with improving the Enhanced Services Program components, since we will be in the privileged position of seeing the efficacy of pilot program interventions from a more distant, dispassionate perspective.

The Rae Review also recommends the

implementation of a new province-wide web portal as a source of current information about institutions and program availability, admissions requirements, financial aid and career opportunities. It is recommended that his portal provide specific information to students with disabilities regarding what supports are available at each institution. Since the *Transitions* Portal was a highly successful tool from both the administrative and participant side, we are hoping that it may serve as a good example of what the Provincial portal could be. Furthermore, as the *Transitions* Portal is merging with the LOTF website to provide more information about accessibility and education issues, we hope that the proposed provincial portal and the new Post-Secondary Learning Disability Initiative Portal can jointly provide students with learning disabilities with as much up-to-date information as possible.

Furthermore, we expect that the data collected over the duration of the study will help to address some key issues facing students with learning disabilities as they navigate through their education and into the various stages of their career. To that end, we are interested in assembling information in answer to the following questions:

- how are students with learning

disabilities assisted with selection of their program of study and courses leading up to and through the transition from secondary school to post-secondary education?

- as students continue their studies in college or university, what program advising are they able to access?

- do students have career guidance opportunities, and do they take advantage of these?

- does this guidance adequately service their unique needs as students with learning disabilities?

- are student with learning disabilities given opportunity to gain work experience related to their field of study?

- are students given access to programs that focus on job readiness and successful career development?

- overall, are students given adequate assistance with transition from post-secondary education to employment and career avenues?

While students with learning disabilities may be a small group within the total post-secondary educational sector, research carried out by the Learning Opportunities Task Force in Ontario and supported by much of the literature on learning disabilities, has shown that providing supports for this population also tends to enhance successful outcomes for students within the general population. For example, the concept of Universal Instructional Design was introduced in Ontario within the field of learning disabilities, but in fact benefits all learners. It is our expectation that the ongoing research work of this longitudinal study will benefit the educational system as a whole. The questions we are asking our *Transitions* panel may very well impact upon how the post-secondary sector views the transition to the employment world and subsequent stages of career development, with all of its challenges, both for students with learning disabilities and all other students.

IX. LOOKING AHEAD TO THE SECOND PHASE

While compiling the data from the intake surveys and writing the final report, we have prepared for the second phase of the *Transitions* longitudinal study. In the next survey, we will be asking participants some of the same questions in an effort to track their progress over time in key areas of interest. Since the term 'longitudinal' does not necessarily connote repeated measures, we have also decided to change certain aspects of the second survey in order to probe deeper into emerging trends and eliminate any questions that would be redundant.

The data collected from the intake surveys provided the basis for new questions. For instance, in order to learn more about educational trends in our population, particularly since so many of the participants are still studying, we are asking them very specific questions about their motivations for pursuing further education. In the second phase, we are querying participants about student debt, and about what effect it is having on their lives. In order to better gauge under-employment in our population, we have decreased the salary ranges to five thousand-dollar increments, and we are asking participants directly if they consider themselves to be under-employed. We are also probing deeper into the issue of disclosing a learning disability in the workplace. In the area of social life, we are going to question those participants who are currently living with their parents about their reasons for doing so. These new questions added to the second survey will help us to piece together a more comprehensive profile of our dynamic participant population.

Once the final draft of the second survey was completed, we met with two students registered with the Paul Menton Centre for Students with Disabilities at Carleton University and asked them to give us their feedback on the new survey questions. Once again, this was a beneficial exercise that helped to improve the structure and clarity of the survey.

The second survey was completed in late November and was uploaded to the Portal soon after. The second edition of the '*Transitions* Update'

newsletter was e-mailed to pilot school contacts and participants to inform them about recent developments and particularly about the second phase beginning in December. The response to the newsletter from participants was very positive, and pilot school contacts continue to encourage former pilot students to become join the *Transitions* study. There are already six new students for the second phase who have completed the intake survey and will be asked to do the survey for the second phase in the spring of 2005.

Over a period of nine months, through the initial stage of the study, we improved upon the study's design and process. As a result, we are ready to proceed to the next phase with a greater focus and more experience.

X. CONCLUSION

The tentative results and emerging trends from first year of *Transitions* are encouraging. Perhaps even more encouraging is the fact that this project came together in the first place, and shows every indication of being sustainable. Longitudinal follow-up studies are fraught with logistical difficulties. They are expensive to run, difficult to engage participants in, and suffer from high attrition rates.

We had hoped to gather a panel of about 100 participants. With a lot of hard work and a little elbow grease, we were thrilled to receive consent forms and to successfully survey 210 participants by the end of the first cycle. Participants were rewarded with a gift certificate from a bookstore, and considerable effort had been expended to maintain contact with participants in order to address the problem of potentially high attrition rates. Participants will be engaged throughout the year through newsletters, phone calls, thank- you cards, and use of the web-based *Transitions* Portal. According to our research, this is the first time an interactive Portal has been used in a longitudinal study. It seems very appropriate that a study of adults with learning disabilities should occasion this first, given the extent to which our panel has proven itself to be highly computer literate.

The first cycle of surveying has revealed a number of trends that will be tracked as we move forward. We welcome following our panel to note change, and to probe more deeply into issues as these emerge. With a balanced mix of both quantitative and qualitative data over a span of time, *Transitions* will provide an unprecedented body of knowledge about adults with learning disabilities. For all its difficulties, no other form of inquiry yields as rich and holistic an understanding of a designated population as does longitudinal research.

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XII. APPENDICES

XII .1. Appendix A: Validation Status, Documentation and 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.

XII. Appendix B: *Transitions* Documents

XII.2.a) Introduction to *Transitions*

XII.2.b) *Transitions* Consent Form

XII.2.c) *Transitions* Intake Survey

XII.2.d) Second *Transitions* Survey, Fall 2004-Winter 2005

XII.2.e) *Transitions* Update, July 2004

XII.2.f) *Transitions* Update for Pilot School Contacts, July 2004

XII.2.g) *Transitions* Update, December 2004

XII.2.h) *Transitions* Update for Pilot Contacts, December 2004

XII.2. a) Introduction to *Transitions*

<center>**CALLING ALL PILOT STUDENTS!!**</center>

Hello and greetings to you from the Learning Opportunities Task Force! We hope all has been well since you left your pilot program.

All the pilot students (more than 1,200) at ten colleges and universities have already made a tremendous difference in improving Ontario's post-secondary services for students with learning disabilities. But, we do not want to stop there. The Task Force and the pilot institutions believe you still have a great deal to teach us. We therefore invite you to join us in the next phase of applied research, a **longitudinal study** called **"Transitions".** Here is some information to help you decide.

- **What is a longitudinal study?** Longitudinal research means maintaining contact with a defined group of people over a long period of time, typically for a period of about ten years.

- **What is this Transitions Longitudinal Study?** Transitions is a new Task Force research study starting in 2003. We would like to talk to you once a year, most likely by telephone, to ask what you are doing, and stay up-to-date on your current activities, like work, job searches and further education. We want to know what you have been finding satisfying, and what barriers you might be encountering. We are interested in knowing your perspectives on what past and present supports are helping or hindering the work, study and life challenges you are now facing. Or if you would prefer, you can participate in Transitions and answer our questions without agreeing to a telephone interview. A central communication vehicle for Transitions is going to be a new and exciting web-based Portal. You can easily and conveniently complete our questionnaire on-line through LOTF's Portal.

- **So what is this new web-based Portal?** LOTF has added an interactive Portal to its web-page (www.lotf.ca/portal) The Portal has been set up exclusively for you as a participant in Transitions. It's really quite fantastic what the Portal can do to creatively pull people and ideas together. To begin with, you can easily register to participate in Transitions on-line, once you have signed and sent us a consent form. And importantly for a longitudinal study, you can easily update your contact information as we go along. As mentioned the annual Transitions questionnaire can be conveniently completed through the portal. As well, the portal has a number of features that will be shaped by your interests, and your desire to make contact with former pilot friends and colleagues. The portal offers discussion groups and the capacity for user-groups to be established, according to what you decide is important. In fact, it is possible to set-up discussion and user-groups amongst participants, and separate from LOTF's prying eyes. In the discussion forums, where topical questions are posed, an informal poll can be taken just to see what other people are thinking. There is a calendar to list upcoming events, announcements will be posted, and an (*optional)

members list will exist for those wishing to have their names shared with other Transitions participants. There is also an opportunity to network with people, compare notes and make contacts related to important issues such as careers and employment. To this end, the Portal will include a Download function of resources relevant to any number of social and employment issues. If you chose to participate in Transitions, I'm sure you will agree that in addition to you giving information, the Portal will give you information and contacts that can be tailored to meet your needs and interests.

- **Do I have to participate in Transitions?** No, it is entirely up to you. There are no negative consequences for you if you decide not to do so. If you want to participate, you may choose whether you prefer to participate in the telephone part only, through the Portal only, or in both. In fact, you may change your mind from year to year about what option is most convenient or interesting for you.

If you agree to give this a try, you are, of course, free to stop participating in Transitions at any time. But we do hope you will think about this invitation - because we certainly would value your ongoing contribution. In fact, we are quite excited about the possibility of sustaining this contact, and continuing to be guided by your current and future experiences.

- **What are the benefits of participating?** Well, we think this can be an interesting and even fun activity. It will take very little of your time, yet keeps you in touch with the Task Force and with other former pilot students. By participating in Transitions you will extend and deepen our knowledge of the needs of adults with learning disabilities. This may well help shape public policy and programs - about working environments, human rights, or further education, for example - in important ways.

We will provide you with regular updates about Transitions' progress and findings, and even inform you about relevant resources in the LD field. Many conveyed their appreciation of the services they received as pilot students, and asked how they might in turn contribute something further to others' experiences. And just to show that we appreciate your willingness to participate, once a year we will send you a gift-certificate to a bookstore, a movie-theatre or a restaurant.

- **What about my privacy? What if I want to retain control over who even knows I have a learning disability?** As was the case with all previous Task Force research, we promise to protect your privacy. (* The Portal includes a document called Information Management Issues, which outlines the careful way all Transitions information will be handled). None of our reports will identify participants in any direct or indirect way. You can have access to all our reports, in case you want to check up on this, or just see them for general interest. Your name and contact information will be known only to your own former pilot institution and the Task Force, and will be stored in a way that safeguards your privacy. Any telephone messages or other communications with you will be directed only to you. And as mentioned, it is your choice to identify yourself on the Portal membership list or to remain anonymous.

We will be careful not to leave identifying messages on work or home answering machines, not to send

faxes to where anyone else might read these, and not to identify or discuss your participation with anyone else, unless you have given explicit permission for this to happen. When staff from your former pilot institution or from the Task Force need to leave a message for you, we will simply provide the person's name, telephone number or e-mail, and identify whether we are from the pilot institution (not the special needs or disability services office) or the Task Force.

- **Are there any exceptions to this privacy protection?** The only exception would be if a former pilot student decided to share information with the Task Force interviewers that raises serious questions about the participant's or others' immediate safety and well-being. In such a case, we would likely make a referral to pilot staff (or other appropriate people) for crisis counselling or intervention. Whenever possible, we would talk about this with the participant in advance of any such referral.

- **How much time or money would this take up?** The telephone interviews will last about thirty minutes, once each year. Completing the Portal questionnaire will only take about thirty minutes, as it asks essentially the same questions. It is really up to you how much time you spend once you have discovered the many interesting features on the Transitions Portal. And there are no costs to you whatsoever.

- **What happens next?** If you are interested, we would very much appreciate it if you would complete the <u>Transitions Consent Form</u> (available for download from the LOTF Portal). Mail it to LOTF at: 13270 Yonge St., Unit 100, Richmond Hill, ON, L4E 2T2, or send it to your pilot institution contact person. Then someone from the Task Force office will contact you to arrange a convenient time for the telephone interview or else send you an e-mail confirming your participation and outlining the advantages to using the LOTF Portal. You'll be told the name of the Research Assistant who conducts the interviews, and who is available to you, should you have questions about Transitions. The people whose names are listed below are available to you to answer any questions and to assist your participation in Transitions:

  - At your former Pilot College or University, the Transitions contact is:
    Loyalist College -Kathy Thomas, e-mail - kbthomas@loyalistc.on.ca
    Conestoga College- Marian Mainland, e-mail mmainland@conestoga.on.ca
    Fanshawe College- Lisa Pegg, e-mail lpegg@fanshawec.ca
    Canadore College- Mary Close, e-mail closem@canadorec.on.ca
    York University-Martha Gorman, e-mail martha@torku.ca
    Trent University- Grace Mahoney, email gmahoney@trentu.ca
    University of Guelph- Bruno Mancini, e-mail bmancini@uoguelph.ca
    Nipissing University- Dan Pletzer, email danp@nipissingu.ca
    Cambrian College- Kim Glibbery, email kaglibbery@cambrianc.on.ca
    Georgian College– Kathryn Peet, e-mail kpeet@georgian.on.ca

•At LOTF, your contacts are:

Larry McCloskey, Consultant, e-mail larry_mccloskey@carleton.ca

Sandeep Lidder, Research Assistant, e-mail slidder@connect.carleton.ca

Kim Curley, Research Assistant, e-mail kcurley@connect.carleton.ca

If you would prefer to speak to the LOTF contacts by phone, just leave a message for Larry, Sandeep or Kim at the LOTF office. You can call toll-free at **1-800-342-6549**

• **How else might I help?** In two ways: (1) First, by staying in touch with your former pilot institution about any changes in your address, telephone number and e-mail address. (2) Second, by spreading the word about this exciting opportunity to other former pilot students with whom you may be in touch. Not everyone may still be in contact with their pilot institutions, so if you know anyone who might like this information sheet, please pass it along or let your pilot staff know about interested people (just former pilot students, of course - you are the only ones now eligible for Transitions participation).

• **Tell me again why I should participate?** Collectively, you and other pilot students, together with the pilot staff, have helped us change the post-secondary landscape in Ontario. The unique elements of our collective work are increasingly attracting national and international attention, potentially helping students beyond our province. Now we are inviting you to help us better understand - and influence - other areas that affect adults who are learning, working and living with learning disabilities. We invite you to participate in this exciting long-term venture. It will take only a little of your time, yet with your help, the benefits of Transitions may also be great.

Thank you so much for considering our invitation!!

XII. 2. b) *Transitions* Consent Form

TRANSITIONS CONSENT FORM

Please fill out this form, <u>sign it,</u> and return it to your pilot institution OR mail it to Larry McCloskey c/o Paul Menton Centre for Students with Disabilities, Room 500 University Centre, Carleton University, 1125 Colonel By Drive, Ottawa ON, K1S 5B6. <u>Thanks!!</u>

- First and last name _____
- Current area code _____ and telephone number _____
- Other telephone numbers? _____
- E-mail address _____
- Current mailing address _____

_____

1. I have had a chance to consider the information about Transitions in "Calling All Pilot Students" and I am interested in participating in ...

(Choose either one or even both)	Yes √	No √	Maybe √
Phone interviews			
Portal questionnaires			

2. In case I move or change my telephone numbers or e-mails, and forget to inform Transitions, you have my permission to get in touch with others, listed below, who can probably give you the new contact information:

Name of contact	Area code + phone, e-mail and/or address	Relationship (e.g. parent, friend, neighbour, relative)

4. Any other comments or questions: _____

_____

SIGNATURE _____ **Date** _____

XII.2. c) *Transitions* Intake Survey

LONGITUDINAL STUDY QUESTIONNAIRE

Please tell me a bit about yourself:

1. Date of Birth: day____month____year_____

1

2. Gender: O Male   O Female

Please tell me about your education:

3. Did you graduate from college/university?   O Yes   O No

    If yes, what year_____

What did you receive on graduation?   O Degree   O Diploma   O Certificate

4. From which college or university did you graduate_____

5. Are you currently studying?   O Yes   O No

    If yes, are you attending university _____   college _____   training program _____

What is your area of study? _____

Are you full-time _____   part-time _____

Are you registered as a student with a disability?   O Yes   O No

If yes, are you using accommodations to enhance your success?   O Yes   O No

Are these essentially the same accommodations as you used in the pilot project?
O Yes   O No

Are you currently using Assistive Technology to enhance your success?   O Yes   O No

6.   When were you involved in the LOTF Pilot Project?

From _____   To_____

7.   Are you still in contact with staff in the Special Needs Office or within the Enhanced Services Program?

O Yes   O No

If yes, please explain_____

8. As you reflect on your years in the LOTF pilot program, can you please indicate your **current** level of satisfaction with the services/program that you received with respect to their impact on the following: *(Please circle only one answer for each statement)*:

	Completely Satisfied	Very Satisfied	Fairly Well Satisfied	Somewhat Dissatisfied	Very Dissatisfied	
Knowledge of your LD	1	2	3	4	5	N/A
Self confidence /self-esteem	1	2	3	4	5	N/A
Accommodation of your LD	1	2	3	4	5	N/A
Disclosure of your LD	1	2	3	4	5	N/A
Social interaction/relationships	1	2	3	4	5	N/A
Other:_____	1	2	3	4	5	N/A

Please tell me about your work/career:

9. While studying during your Post Secondary program, did you have a summer job?

      O Yes   O No

If yes, was it   O Full time   O Part time

10. While studying, did you work part time during Academic Years?

O Yes   O No

 If yes,   How many hours did you work per week? _____

11. While studying, did you have a co-op placement or equivalent?

O Yes   O No

If yes,   How many years? _____

12. While studying, did you do Volunteer work?

O Yes   O No

If yes,   What type of work?

_____
_____
_____

13. Did you have any other work related experience?

O Yes   O No

   If yes, please
explain_____

_____

14. What has been your employment status since leaving school?

_____

_____

15. Are you currently employed?   O Yes   O No   *If no*, skip to question # 23.

Please tell me about your current job:

16. What is your job title? _____

17. Who is your employer?

_____

18. What is the type/category of your current work? _____

19. How long have you been with the current employer?

_____

20. What kind of work is it?

O Permanent   O Casual   O Probation   O Contract

O Other_____

How many hours do you work each week?_____

21. What is your annual gross salary? (*please select one*):

O Less than $20,000   O $50,000 - $64,999

O $20,000 - $34,999   O $65,000 - $89,999

O $35,000 - $49,999   O Over $90,000

22. Does your current employment match with your program of post-secondary study and career aspirations?

     O Yes   O No

Any comments:

_____
_____
_____
_____

23. What are your future work/career plans?

_____

Please tell me about your social life:

24. Have you made friends at work?   O Yes   O No

  If no, please explain

_____

_____

25.   Do you have a comfortable working relationship with your colleagues?

O Yes   O No

  If no, please explain

_____

_____

_____

26. Do you see your work colleagues outside of work?   O Yes   O No

If yes, how often

_____

_____

_____

27. Do you have friends completely separately from your work colleagues?

O Yes   O No

If yes, where did you meet them?

O Childhood

O School

O Post-secondary

O Current neighbourhood

O Other (*please specify)*

_____

28.   What are your free time activities?

O Hobbies

O Arts

O Sports

O Clubs

O Religious groups

O Other (*please specify)*

_____

29. When you have free time, do you generally choose to spend it   O alone   O with others

30. What do you like to do during weekends and vacation time?

_____

_____

_____

_____

31. Regarding your current living arrangements, do you live: *(please check one)*

O   With your parents

O   With other family

O   With a spouse/partner

O   With friends

O   In residence

O   Alone

O   Other (*please specify*)

_____

  Which of the above living arrangements would you consider ideal for you?

_____

_____

_____

32. Regarding your friendships and relationships, how would you rate your current level of satisfaction.

O Very satisfied   O Satisfied   O Somewhat satisfied   O   Not satisfied   O Very dissatisfied

Please tell me about the impact of your learning disability:

33. Please explain how your learning disability currently affects you.

_____
_____
_____

34. In what area of your life does your learning disability most affect you?

O   Education   O Work   O Relationships

In what area of your life does your learning disability least affect you?

O   Education   O Work   O Relationships

35. Have you disclosed that you have a learning disability at work?   O Yes   O No

       If yes,   When and what has been the result?
_____
_____

       If no,   Why not?
_____
_____

36.   Have you disclosed to friends, family or others outside of work?   O Yes   O No

       Please specify:
_____
_____
_____

37.   Are you using accommodations currently at work?   O Yes   O No

Please specify:

_____
_____
_____

38.   Please indicate your 3 most significant current supports:

_____
_____
_____

39. Did you use these supports as accommodations when you were a pilot student?

O Yes   O No

    If yes, Please specify:

_____
_____
_____

40.   Please indicate your 3 most significant current challenges or obstacles:

_____
_____
_____

41. What is your greatest success right now and why do you think you are successful at this?

_____
_____
_____
_____

42. Does your current work build on your areas of strength and interest?

O Yes   O No

Please explain your answer:

_____
_____

43.   Does your current work allow you to avoid your greatest areas of difficulty?

O Yes   O No

Please explain your answer:

_____
_____
_____
_____

44. What advice would you give to a high school student with a learning disability as he or she begins post-secondary education?

_____
_____
_____

45. Please tell me about your life goals, and if you are moving towards realising them.

_____
_____
_____

Thank you for taking the time to help us by completing this survey.

If there is any change in your contact information, please provide us with your new contact information in the space below:

Name: _____

Address: _____

_____

Telephone number: _____

Email address: _____

XII. 2. d) Second *Transitions* Survey, Fall 2004-Winter 2005

TRANSITIONS LONGITUDINAL STUDY QUESTIONNAIRE
Phase II: Winter/Spring 2005

Date survey was completed: _____

Token ID: _____ Date survey was inputted: _____ (telephone surveys only)

Personal Information

1. Name: _____ 2. Pilot Institution: _____

3. Age: ____ 4. Gender: O Male O Female

Education

5. Have you graduated from college/university? O Yes O No

If yes, proceed to question # 6
If no, proceed to question # 7

6. If yes, please list all institutions and programs you have graduated from and the year you graduated:

Institution graduated from	Program (diploma, BA)	Year Graduated

7. Are you currently studying?   O Yes   O No

ANSWER **ONLY** THE FOLLOWING QUESTIONS THAT APPLY TO YOUR CURRENT SITUATION:

I. GRADUATED – IN SCHOOL AGAIN

a) If you have graduated and are currently studying again, why did you choose to return to school?

        O to increase employment opportunities and obtain a better paying job

        O love of education

        O to specialise more in my field (e.g. Master's)

        O I do not know what career to pursue

        O school is a safe environment for me

        O to obtain professional qualifications (e.g. B.Ed., L.L.B., Medical School)

        O to shift career direction

        O other: _____

If possible, please elaborate: _____

_____

    II. NOT GRADUATED – STILL IN SCHOOL

b) If you have not yet graduated and are currently studying, are you still in the program you were in as a pilot student? O Yes   O No

c) If yes, why?

        O financial reasons (must work a lot)

        O more time required to graduate because of my learning disability

        O difficulty deciding what career to pursue

        O love of education

        O other: _____

d) If no, why did you choose to switch programs or to focus on something else? _____

_____

e) (for both yes and no) If you have not yet graduated and are currently studying, do you intend to pursue further education after graduation? Why or why not? _____

_____

III. NOT GRADUATED – NOT IN SCHOOL

f) If you have not yet graduated and are not currently studying, why did you leave your program without graduating?

        O did not enjoy what I was studying

        O cannot decide what I want to do

        O found employment and decided to leave school

        O could not afford to pay for tuition, books, etc.

        O could not pass all of the required courses to obtain degree/diploma/certificate

O other: _____

If possible, please elaborate: _____

_____

g) If you have not yet graduated and are not currently studying, do you plan on returning to school in the near future?   O Yes   O No

h) If yes, what do you plan to take and why? _____

_____

i) If yes, when do you think you will return to school? _____

_____

j) If no, why not? _____

_____

IF CURRENTLY STUDYING:

8. Are you a: O full-time student   O part-time student

9. Are you attending: O university   O college   O trade program (e.g. welding)

10. What is your field of study? _____

11. Are you registered as a student with a disability?   O Yes   O No

a) If yes, are you registered with: O Special Needs Office   O Enhanced Services

b) If no, why not? _____

_____

12. Are you using accommodations to enhance your success?   O Yes   O No

a) If yes, which accommodations are you using? _____

b) If no, why are you not using accommodations? _____

_____

13. Are you essentially using the same accommodations as you used in the pilot project? O Yes
          O No   O N/A

If possible, please elaborate: _____

_____

14. Are you using assistive technology to enhance your success?   O Yes   O No

a) If yes, what are you using? _____

_____

b) If no, why are you not using assistive technology? _____

15. When do you expect to graduate? _____

16. Are you working part-time while studying?   O Yes   O No

       [Note: part-time is considered less than 35 hours per week]

a) If yes, how many hours per week? _____

17. Are you working full-time while studying?   O Yes   O No

       [Note: part-time is considered 35 hours per week and up]

a) If yes, how many hours per week? _____

18. Do you currently have a co-op placement?   O Yes   O No

a) If yes, why are you taking co-op?

O to obtain relevant work experience

O financial reasons

O to try out a job in my field of study

O co-op is required for my program

19. Do you currently have a non-paying internship or a placement?

O Yes   O No

20. Do you do volunteer work? O Yes   O No

a) If yes, how many hours per week? _____

21. Are you in debt from student loans?   O Yes   O No

a) If yes, what is the amount of debt you have incurred from student loans?

      O Under $5,000   O $15,000 - $20, 000   O $30,000 - $40,000

O $5,000 – $10, 000   O $20, 000 – $25, 000   O $40, 000 – $50, 000

O $10,000 – $15,000   O $25, 000 - $30, 000   O $50, 000 +

b) If yes, what effect does your student debt have on your life at this time?

_____

_____

Employment

22. Are you currently employed?   O Yes   O No   If no, proceed to question # 39

   a) If yes, what kind of work is it?

      O Full-time permanent   O Contract

      O Full-time temporary   O Seasonal

      O Casual   O Part-time

      O On probation   O Other_____

23. What has been your employment history over the past 2 years? _____

_____

_____

24. What is your job title? _____

25. What type of work do you do? (please select only one)

O Accounting/finance   O Computers/Internet   O Office/administrative

O Agriculture   O Construction/factory/trade   O Restaurant/hospitality

O Automotive   O Education   O Retail/customer service

O Childcare/recreation O Health and fitness   O Security/corrections

O Communications   O Healthcare   O Other

26. How long have you been with your current employer? _____

27. How many hours do you work each week?_____

28. What is your annual gross salary?

O Less than $5,000   O $20,000 – $25,000   O $40,000 - $45,000

O $5,000 – $10,000   O $25,000 - $30,000   O $45,000 - $50,000

O $10,000 - $15,000   O $30,000 - $35,000   O $50,000 – $60,000

O $15,000 - $20,000   O $35,000 - $40,000   O Over $60,000

29. Does your current employment match with your post-secondary program and/or your career aspirations?   O Yes   O No

a) If possible, please elaborate: _____

_____

30. Would you consider yourself to be **under-employed**?

 [Note: employed at a lower level than your education and work experience warrants]

O Yes   O No

a) If possible, please elaborate: _____

31. Does your current work build on your areas of strength and interest?　O Yes　　O No

a) If possible, please elaborate: _____

_____

32. Does your current work allow you to avoid your greatest areas of difficulty?　O Yes　　O No

a) If possible, please elaborate: _____

_____

33. Have you disclosed that you have a learning disability at work?　O Yes　　O No
a) If yes, when did you disclose? _____
b) If yes, what has been the result? _____
c) If no, why have you not disclosed? _____

_____

34. Are you currently using accommodations at work?　　O Yes　　O No

a) If yes, which ones specifically? _____

_____

b) If yes, how was your request for accommodations treated? _____

_____

c) If no, have you asked for accommodations at work?　O Yes　　　O No
d) If you have asked for accommodations at work but are not currently using any, why

not? _____

_____

e) If you have not asked for accommodations at work, why not? _____

_____

35. Are you currently using assistive technology at work?   O Yes   O No

a) If yes, what specifically are you using? _____

_____

b) If no, have you asked for assistive technology at work?   O Yes   O No

c) If yes, how was your request for Assistive Technology treated? _____

_____

d) If no, why have you not asked? _____

_____

36. What are your future work/career plans? _____

_____

37. Do you have a comfortable working relationship with your colleagues? O Yes   O No

a) If possible, please elaborate:_____

_____

38. Do you see your work colleagues outside of work?   O Yes   O No

a) If yes, how often do you spend time with them outside of work?

O Not often   O Occasionally   O Very often

Social life

39. Other than at work, where did you meet the people you spend time with?

O Childhood/Elementary School   O High School   O Post-secondary

O Family   O Current neighbourhood

O I only spend time with people I have met at work

O Other (please specify) _____

40. What do you do during your free time?

O Hobbies   O Arts   O Sports   O Clubs   O Volunteering

O Religious groups   O Other (please specify) _____

41. When you have free time, do you generally choose to spend it:

  O alone   O with others

42. Do you currently live with your parents?   O Yes   O No

a) If you do, please explain why:

O Financial reasons   Please be specific: _____

O Cultural reasons   Please be specific: _____

O Still dependent upon parents Please be specific: _____

O Preferred living arrangement Please be specific: _____

b) If not, what are your current living arrangements?

O With other family members   O With a spouse/partner   O With friends

O In residence   O Alone   O Other : _____

c) Are you satisfied with your current living arrangements?   O Yes   O No

d) If possible, please elaborate: _____

_____

43. Regarding your **friendships**, how would you rate your current level of satisfaction?

O Very Satisfied   O Satisfied   O Somewhat Satisfied   O Not Satisfied   O Very Dissatisfied
O No friends

44. Regarding your **relationships** (spouses, boyfriends/girlfriends), how would you rate your current level of satisfaction?

O Very Satisfied   O Satisfied   O Somewhat Satisfied   O Not Satisfied   O Very Dissatisfied
O No relationships

45. Regarding your relationship with **family** members, how would you rate your current level of

satisfaction?

O Very Satisfied   O Satisfied   O Somewhat Satisfied   O Not Satisfied   O Very Dissatisfied
O No family relationships

Impact of learning disability

46. In what area of your life does your learning disability **most** affect you?

O Education   O Work   O Relationships

47. In what area of your life does your learning disability **least** affect you?

O Education   O Work   O Relationships

48. Please explain **specifically** how your learning disability affects you at this time:

_____

_____

_____

49. Please indicate your 3 most significant current **supports** related to your learning disability (for example, a tutor, software, Palm Pilot, etc.):

[Note: If not applicable, please enter N/A. Do not leave blank]

    1.

    2.

    3.

50. Please indicate your 3 most significant current **challenges or obstacles** related to your learning disability:

[Note: If not applicable, please enter N/A. Do not leave blank]

      1.

      2.

3.

The Future

51. Please tell me about your life goals, and how you are moving towards realising them:

_____

_____

_____

Portal

52. Have you logged on to the LOTF Portal in the past?   O Yes   O No

a) If yes, what did you think of it? _____

_____

b) If no, what features would make you want to visit the Portal? _____

_____

Thank you for taking the time to do the phase 2 survey. Do you have any questions for me?

53. Whether or not there has been any change, please provide us with your contact information to facilitate any further correspondences:

Address: _____

_____

XII. 2.e) *Transitions* Update for Participants, July 2004

An informal e-newsletter about LOTF's longitudinal study

July 2004

Dear *Transitions* Participant,

As a pilot student, you helped to make a tremendous difference in improving Ontario's post-secondary services for students with learning disabilities. As a participant in *Transitions*, you are continuing to teach us and help us better understand other areas that affect adults who are learning, working, and living with learning disabilities.

 *We thank you for participating in this exciting study and look forward to speaking to you again in the near future as **Transitions** moves into its second phase.*

We have just exceeded our goal of 200 participants!

As of this week, we have surpassed our goal of 200 **Transitions** participants and the number is still growing, since Nipissing University and Georgian College came on board just recently… welcome! Congratulations goes out to the staff at Conestoga College for sending in the most consent forms out of all the institutions at **33**! The University of Guelph, York University, and Trent University are in a three-way tie for second place at **25** consent forms apiece.

From the research we have done on longitudinal studies, 200+ participants is an impressive number. Still, since the attrition rate is anticipated at about 10% in a study of this magnitude, we would like to remind you that the study is fluid - we will be accepting former pilot students to be a part of the longitudinal study for its duration. You can act as an ambassador for the **Transitions** study and possibly recruit new participants. If you are still in contact with students who are eligible - meaning they were part of a pilot project from 1997 to 2002 - and they are interested in becoming part of the study, you can direct them to the LOTF Portal where they can find out all they need to know and even download the consent form.

Study Update

You may be wondering what stage of the study we are currently in. We are in the midst of having the last few participants complete the survey, and we will be starting to draft the final report by the end of this week. We expect the report to be finished by the fall, at which point we will begin the second round of surveys. All participants were mailed a **Transitions** thank-you card and a $20 Chapters gift certificate as an honorarium earlier this week (to the last address they provided to us). We inserted a note in each card encouraging everyone to keep us up-to-date regarding address, e-mail, or phone number changes. If you are moving in the near future or if your e-mail address has changed, you can update this pertinent information on the LOTF Portal or by getting in touch with the **Transitions** contact person at your former pilot school.

Have you checked out the LOTF Portal yet?

The LOTF Portal (located at **www.lotf.ca/portal/**) features:

Transitions study updates

Contests

Poll questions

Employment advice

Relevant web resources for adults with learning disabilities

Online version of the *Transitions* survey

In addition to completing the first phase of the longitudinal study, we are making the Portal more interactive and engaging every day. The focus of the Portal this year is **employment**. As such, the postings currently range from how to go about getting special accommodations for the LSAT, MCAT, GMAT, and GRE to a job posting with Bender Consulting, a company that strives to employ learning disabled individuals in the high tech field. A new feature of the Portal is called 'Ask Your Employment Question', and we have recruited the help of a Career Counsellor to offer his advice for the more complex queries.

Although the online survey is reserved for *Transitions* participants only, all of the LOTF Portal's other resources are available to anybody who registers on the site. Please let others know the web address if you feel they would benefit from the information!

Pilot School Contact Information

At some institutions, the staff member who was overseeing the Transitions study in the spring is not the same person the *Transitions* Research Team is corresponding with now. The following is an updated list in case you need to get in contact with that individual:

Julie Ouellette, University of Guelph   jouellet@uoguelph.ca

Dan Pletzer, Nipissing University   danp@nipissingu.ca

Grace Mahoney, Trent University   gmahoney@trentu.ca

Kathy Thomas, Loyalist College   kbthomas@loyalistc.on.ca

Kathryn Peet, Georgian College   kpeet@georgianc.on.ca

Kim Glibbery, Cambrian College   kaglibbery@cambrianc.on.ca

Shelley Reynolds, Fanshawe College   sreynolds@fanshawec.ca

Marian Mainland, Conestoga College   mmainland@conestogac.on.ca

Mary Close, Canadore College   closem@canadorec.on.ca

Martha Gorman, York University   martha@yorku.ca

Research Team Contact Information

Larry McCloskey, Consultant to LOTF   larry_mccloskey@carleton.ca
Sandeep Lidder, Transitions Research Assistant lidder@gmail.com
Kim Curley, Transitions Research Assistant   kcurley@connect.carleton.ca

XII. 2. f) *Transitions* Update for Pilot School Contacts, July 2004

An informal e-newsletter about LOTF's longitudinal study

July 2004

Dear Pilot School Contacts,

The ***Transitions*** Research Team would like to thank you for your invaluable support over the last seven months. By contacting former pilot students, recruiting them to be part of ***Transitions***, and managing to obtain signed consent forms, you accomplished much of the work that is required to make a longitudinal study of this magnitude successful. Your continual hard work and dedication in this task is by no means surprising, for while the Research Assistants were conducting telephone surveys, they heard so many complimentary things about the pilot projects from students. This was particularly the case in response to a survey question regarding their greatest success right now, and to what they attribute this success. The following comments are just a few examples:

"My greatest success to date is completing two consecutive years of studies. I tried to do it in the past and couldn't. Now I have the resources I need, I know what to do and who to ask, and I have gained more confidence".

"Completing the Transitions program. It was the greatest feeling of my life. I can't begin to explain what the program did for me".

"I would have to say that my greatest success at the moment is in academics, especially considering how hard it was for me in elementary and high school. I am on the Dean's List and this is what I'm most proud of. I was successful because I had support from everywhere I looked...The pilot program was very supportive and not intimidating at all - it is the reason I am doing so well in university".

As you can see, the pilot students are very grateful for your support, as are we.

We have exceeded our goal of 200 participants!

As of last week, we surpassed our goal of 200 *Transitions* participants and the number is still growing, since Nipissing University and Georgian College came on board just recently… welcome! Congratulations goes out to the staff at Conestoga College for sending in the most consent forms out of all the institutions at **33**! The University of Guelph, York University, and Trent University are in a three-way tie for second place at **25** consent forms apiece.

From the research we have done on longitudinal studies, 210 participants is an impressive number. Still, we have also discovered that the attrition rate is anticipated at about 10% per year. Therefore, we would like to remind you that the study is fluid - we will be accepting former pilot students to be a part of the longitudinal study for its duration. The 210 (and counting) participants in the database can now act as ambassadors for the *Transitions* study, and once the final report is available on the Portal, it may generate some new interest. If you hear from students who are eligible (meaning they were part of a pilot project from 1997 - 2002) but not yet a part of the study, you can direct them to the Portal where they can find out more information and even download the *Transitions* consent form.

Study Update

You may be wondering what stage of the study we are currently in. We are in the midst of having the last few participants complete the survey, and we will be starting to draft the final report by the end of this week. We expect the report to be finished by the fall, at which point we will begin the second round of surveys. All participants have been mailed a **Transitions** thank-you card and a $20 Chapters gift certificate as an honorarium. We have also inserted a note in each card encouraging them to keep us up-to-date regarding address, e-mail, or phone number changes. If you are communicating with a former pilot student who is involved with **Transitions** in the next few months, please remind them to update this pertinent information through you or on the LOTF Portal.

Have you checked out the LOTF Portal yet?

The LOTF Portal (located at **www.lotf.ca/portal/**) features:

Transitions study updates

Contests

Poll questions

Employment advice

Relevant web resources for adults with learning disabilities

Online version of the *Transitions* survey

*In addition to completing the first phase of the longitudinal study, we are making the Portal more interactive and engaging every day. The focus of the Portal this year is **employment**. As such, the postings currently range from how to go about getting special accommodations for the LSAT, MCAT, GMAT, and GRE to a job posting with Bender Consulting, a company that strives to employ learning disabled individuals in the high tech field. A new feature of the Portal is called 'Ask Your Employment Question', and we have recruited the help of a Career Counsellor to offer his advice for the more complex queries.*

Although the online survey is reserved for *Transitions* participants only, the resources on the LOTF Portal are available to anyone who registers on the site. Please let students and colleagues know the web address if you feel they would benefit from the information!

Research Team Contact Information

Larry McCloskey, Consultant to LOTF   larry_mccloskey@carleton.ca
Sandeep Lidder, Transitions Research Assistant   lidder@gmail.com
Kim Curley, Transitions Research Assistant   kcurley@connect.carleton.ca

Enjoy the rest of your summer!

XI.2.g) *Transitions* Update for Participants, December 2004

An informal e-newsletter about the Transitions longitudinal study

Dec. 2004

Welcome back!

Since it has been a few months since we were last in contact with you, we thought a quick note to explain what has been happening lately and what you should expect in the near future was in order. We hope all is well and trust that you received the Chapters gift certificate we mailed to you at the end of the summer as a token of our appreciation.

We are about to move into the second phase of interviewing and are happy you are still on board! We have been busy analysing the data collected from the intake surveys and creating new survey questions that reflect interesting trends. We believe former pilot students have a great deal to teach us about education, employment, and social factors that will help to improve the transition from post-secondary institutions to the next phase in life for students with learning disabilities. We want to know what you have been finding satisfying and what barriers you might be encountering. We are also interested in knowing your perspectives on what past and present supports are helping or hindering work or studies as well as the life challenges you are currently facing.

Thank you for being willing to share your post-pilot experiences with us and for staying with us in the *Transitions* longitudinal study. Please do not hesitate to contact one of the individuals listed below or your pilot institution if you have any questions.

Wishing you and your family a safe and fun holiday season,

The *Transitions* Research Team

Study Update – What's Next?

You may be wondering what stage of the study we are presently in. We are in the midst of drafting the preliminary report from the data we collected during the summer. If you are

interested in reading about the first phase of *Transitions*, the completed report will be available on the Portal by spring 2005. In addition, we are beginning the second round of surveying next week. We will be contacting you first by telephone or by e-mail – depending on which method of communication worked best last time – and the interviewing will follow the same process as in the summer. If you completed the survey online in the first phase and you still have your unique token ID number, you are welcome to go ahead and complete the 2004-2005 survey on the Portal anytime. Do not worry if you have deleted your token ID – we will be contacting you soon and we can provide it for you then. If you opted to do the telephone survey in the summer, you certainly have the option to do so again, but we hope you might try the online version for your maximum convenience. Let us ensure you that the Portal functions **much** better this time around – we now have our own server, so it will no longer be crashing in the middle of you filling out the survey!

The only other difference in the second phase is that the new survey has been modified based on the results of the intake survey and also so that questions would not be redundant.   If you have a chance, we would love your feedback on the new survey, particularly if you filled out the first one on the Portal, because the new survey is slightly longer to accommodate the noticeable trends in post-pilot program experiences. Once again, we plan to send you gift certificates to thank you for your continuing participation

This is **very important**: please keep us up-to-date regarding address, e-mail, or phone number changes if you believe we do not have your most current contact information. If any of this pertinent information has changed since the summer and you did not notify your pilot institution or e-mail Kim at **kcurley@connect.carleton.ca**, it is most likely that we do not have it. Simply send a Reply to this message if you need to update our records.

Calling all former pilot students (who are not yet *Transitions* participants)!

By the end of July, we had surpassed our goal of 200 *Transitions* participants and ended up with 210 completed surveys…and our number is still growing! We already have 5 new participants for the second phase. From the research we have done on longitudinal studies, 215 participants is an impressive number. Still, we have also discovered that the attrition rate is anticipated at about 10% per year. Therefore, we would like to remind you that the study is **fluid** - we will be accepting former pilot students to be a part of the longitudinal study for its duration. If you know of anyone who is eligible to participate in this study (meaning they were part of a pilot project at your institution from 1997 - 2002) and might be interested in doing so, you can direct them to the Portal or you can pass their information on to us.

Portal Contest

Have you checked out the LOTF Portal yet? If you completed the first survey online, then you caught a glimpse of it, but if you opted to do a telephone survey, you may have missed it! The Portal is located at **www.lotf.ca/portal/** and features: *Transitions* study updates, poll questions, relevant web resources, employment advice, job postings, and contests. Speaking of contests, there is a new one starting next week - any *Transitions* participants who contribute the most on the Portal will win extra gift certificates. Participation on the Portal is considered anything from posting new messages or responding to past postings to e-mailing the Portal administrator with suggestions about what you would like to see featured on the site, and so on – be creative! Finally, although the online survey is reserved for *Transitions* participants only, the Portal is available to anybody who registers on the site. Please let others know the web address if you feel they would benefit from the information.

Transitions Contact Information

Larry McCloskey, Consultant to LOTF   **larry_mccloskey@carleton.ca**
Kim Curley, Transitions Research Assistant   **kcurley@connect.carleton.ca**
Boris Vukovic, Portal Administrator   **boris_vukovic@carleton.ca**

XI.2.h) *Transitions* Update for Pilot Contacts, December 2004

An informal e-newsletter about the *Transitions* longitudinal study

Dec. 2004

Dear Pilot School Contacts,

Since it has been a few months since we were last in contact with you, we thought a quick note to explain what has been going on recently and what will be happening in the near future was in order. The first phase of the study was very successful, and this was due in large part to the hard work you and your colleagues put in earlier this year. Once again, we would like to thank you for your invaluable support at the beginning of the study. By contacting former pilot students, recruiting them to be part of *Transitions*, and obtaining all of those signed consent forms, you accomplished much of the work that is required to make a longitudinal study of this magnitude successful. A job well done!

As you will read below, we are about to move into the second phase of a potential 10-year study. We believe former pilot students have a great deal to teach us about education, employment, and social factors that will help us to improve the transition from post-secondary institutions to the next phase in life for students with learning disabilities. In order to continue learning from them we will have to overcome two obstacles:

* maintain a strong population over the years, with as low attrition rate as possible

* keep in contact with the participants while their lives are in flux

We are confident that through your continued support, we can not only recruit more participants, but also keep each other up-to-date regarding their contact information on a regular basis.

Wishing you and your family a safe and fun holiday season,

The *Transitions* Research Team

Calling all former pilot students (who are not yet Transitions participants)!

As we reported in July, we surpassed our original goal of 200 **Transitions** participants and ended up with 210 completed surveys in the first phase and 215 participants in total! In terms of the number of participants from each pilot school, this is how the final breakdown looked:

Conestoga College	**33**
University of Guelph	**25**
York University	**25**
Trent University	**25**
Canadore College	**22**
Fanshawe College	**21**
Georgian College	**21***
Loyalist College	**17**
Cambrian College	**15**
Nipissing University	**11**

= **215**

*Georgian College submitted 21 consent forms to LOTF, but by the first round deadline 5 participants had not completed the survey, so they will move on to the second round of interviewing beginning this month

Fortunately, our population is still growing - we already have 5 new participants for the next phase and another consent form is on the way from Canadore College! From the research we have done on longitudinal studies, 215 participants is an impressive number. Still, we have also discovered that the attrition rate is anticipated at about 10% per year. Therefore, we would like to remind you that the study is **dynamic** - we will be accepting former pilot students to be a part of the longitudinal study for its duration. If you know of anyone who is eligible to participate in this study - meaning they were part of a pilot project at your institution from 1997 to 2002 - and you think they might be interested, we urge you to get in touch with them soon or you can pass their information on to us.