

# Factors Affecting Success in Community Based Literacy Programs

## Executive Summary

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# Support

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## About Laubach Literacy Ontario

Laubach Literacy Ontario (LLO) is a non-profit provincial network of affiliated community-based literacy programs, funded by the Government of Ontario through the Ministry of Training, Colleges and Universities. LLO supports its member agencies in the achievement of higher levels of literacy throughout the province.

Community-based agencies recruit, support, and train volunteer tutors to work with adult students in one-on-one and small group situations. LLO works with other provincial and national organizations to understand and advocate for adults with literacy needs.

## About the National Literacy Secretariat

The National Literacy Secretariat (NLS) works to promote literacy as an essential component of a learning society and to make Canada's social, economic, and political life more accessible to people with weak literacy skills. It works in partnership with the provinces and territories, other government departments, business and labour, the voluntary sector and non-governmental organizations to build capacity for literacy opportunities across Canada.

## About the Ministry of Training, Colleges and Universities

The Ministry of Training, Colleges and Universities promotes literacy in Ontario by encouraging and supporting research and development initiatives in literacy, as well as ensuring that those agencies offering the LBS Program have the support necessary to provide quality literacy services.



# Acknowledgments

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### ***Background***

One-on-one or small group: Which delivery method more effectively improves the literacy skills of adults? This simple question sparked the interest of several stakeholders and started a consultation process that ended in a proposal for a collaborative research project aimed at better understanding factors that affect success in community-based literacy programs.

In the summer of 2002, representatives from Laubach Literacy Ontario, Laubach Literacy of Canada, the University of Windsor, and the Learning Disabilities Association of Ontario gathered in Windsor, Ontario to consider common province-wide interests, concerns, and issues related to community-based literacy programs. From these discussions, a research priority was identified and a direction for the present project emerged. It became clear that adults seeking literacy training formed a diverse group of individuals. It seemed reasonable that an individual's characteristics or life circumstances might affect his or her success in a literacy program. Factors such as the availability of transportation, the support of a significant other, or a person's level of physical health might influence ability or motivation to participate in a training program and, in turn, its outcome. Then again, certain training approaches might work well for some students and not so well, or not at all, for others. Therefore, a different question was needed to examine the predictors of success: That is, what works for whom? This new question became the focus of the project.

In order to consider the issue of "what works for whom?" it was necessary to ask three questions:

1. "What are the demographic characteristics of individuals who attend community-based literacy programs in Ontario?"
2. "What are the characteristics of community-based literacy programs?"
3. "What is the relationship between student and program characteristics to outcome?"

Answers to these questions were expected to provide community-based literacy programs with a better understanding of student and program characteristics that relate to successful outcomes and potentially guide the development of best practices.

# ***The Factors Affecting Success Study***

The FAS project was intended to take place over two years. The first year (Phase 1) of the project started with a review of the literature related to the research questions (see Appendix A). This information would provide the foundation for the current study. Also, Phase 1 was to see the development of tools and procedures for data collection, such as a process for recruiting participants, the adoption of survey forms suited to the goals of the project, the development of mechanisms for confidential reporting of data, and the development of a method for tracking participants. Ethics approval for conducting research with human participants, data collection, data analysis, and the reporting of the research findings were expected to occur during the second year (Phase 2) of the project.

However, several methodological issues unforeseen at the beginning of the project had to be considered, extending some of the Phase 1 activities into the second year. It was clear from the literature review that the existing studies were inadequate for establishing what might eventually be considered best practices in adult literacy; that is, determining what works for whom. The emphasis on student vulnerabilities and the general lack of information concerning outcomes were major shortcomings of the literature. This situation required that much work be done to develop methods for gathering information that reflected this new direction. For example, there did not exist in the literature survey forms that could be adopted to collect data to meet the goals of this project. As such, it was necessary to develop data collection forms “from scratch” that reflected the variables of interest.

Whereas it was recognized that there might be risk factors identified that related to outcome, this project placed a greater emphasis on identifying the strengths that students and programs bring to literacy training. To this end, three data gathering forms were created: an Initial Interview Form that focused on student characteristics, goals, and demographic information at or near the time they entered a community literacy program; a Program Practices Form that focused on the characteristics of the literacy program, its staff & volunteers, and the community in which it resides; and an Exit Interview Form that focused on the experiences and outcomes of the student.

Each item in each of the three survey forms was considered carefully with respect to the perspectives and feelings of the potential participants, as well as its relevance to the project goals. Because the quality of the findings would be limited by the quality of the information gathered, this “up front” effort was necessary, especially with an exploratory study of this nature where there was no previous research against which to judge the suitability of the methods to be used.

In order to meet ethical standards for conducting research with human participants, several procedures were required. Before the project could proceed with data collection, the entire research protocol, including the consent to participate forms, the data collection forms, and a description of the research methodology, was submitted to the University of Windsor's Research Ethics Board (REB) for review and approval. This process provided an independent evaluation of the project's merits and ensured that researchers consider the rights and safety of the participants. All university-based research conducted in Canada is expected to adhere to the policies described in the *Tri-council Policy Statement: Ethical Conduct for Research Involving Humans*.<sup>1</sup>

Ethics approval was granted in October 2004, which only left six months for data collection. Consequently, a third year (Final Phase) was implemented in order to extend the opportunity for data collection, an important strategy for increasing the number of participants who would enter and then exit naturally from the program during the study period.

The "*Factors Affecting Success Interview Manual*" was developed to standardize the administration of the interviews and the data collection. A copy was provided to each participating agency.

The above procedures were designed to make the goals and procedures of the project clear to those who chose to participate, to optimize the value of the data collected, and to ensure as much as possible that the participants and the information they provided were treated respectfully and confidentially.

## Methods

Community based literacy agencies from across the Province of Ontario that provided adult literacy training were invited to participate in the project. Recruitment of agencies began in November 2004 and continued until February 2006. Only after an agency consented to participate, did student recruitment begin. Students were recruited only from agencies that consented to participate in the project.

In order to encourage participation and to help off-set the cost of time involved in conducting the interviews, each site received \$20 for each Initial Interview Form returned and \$10 for each Exit Interview Form returned. If a student agreed to participate, the student had the option to refrain from answering any questions he or she chose, and could at any time request that his or her data be removed from the data set.

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<sup>1</sup> *The Tri-Council Policy Statement* describes the standards and procedures for governing research involving human subjects. It involves the policies of the former Medical Research Council (now known as the Canadian Institutes of Health Research or CIHR), the Natural Sciences and Engineering Research Council (SSERC), and the Social Sciences and Humanities Research Council (SSHRC). The document is available online at <http://pre.ethics.gc.ca/>.

It was intended that all of the information gathered would be treated confidentially. In order to ensure that the sites and students could not be linked to the data they provided, Sound Data Solutions (SDS), an independent data management company, was contracted to receive the questionnaires and code the data in electronic form. Either during or soon after the agency survey and student interview surveys (initial and exit) were conducted, the survey forms were mailed directly from the participating agency to SDS. Following the completion of data collection, the complete data set devoid of any identifying information was forwarded to Dr. Casey at the University of Windsor for statistical analysis.

## **Participants**

There were 22 sites that participated in the project, representing 13 of the 16 regional networks (81%). Ten of the agencies (45%) served an urban area and the remainder (55%) served a combination of urban and rural areas. Together, the 22 sites submitted 257 Initial Interview Forms and 257 final Exit Interview Forms. The number of initial interviews by site ranged from two to 54 (the average was 13.9). Just over half of the exit interviews (51.4%) were project initiated, and, as such, represent artificial 'terminations' from the literacy program.

Of the 257 exit interviews collected, 132 were project initiated exits; that is, the students were continuing their involvement with their literacy program but were asked to complete an exit interview for the sake of the data collection. It is reasonable to assume that the data from the artificial exits would not accurately reflect the effectiveness of the literacy programs because the students had not yet completed their programs. Of the remaining 125, 18 participants ceased contact and one participant was deceased. For 82 of the remaining 106 students, it was their first time in a literacy program. The following descriptive statistics are based on the data obtained from the 106 natural exit interviews. The average length of time in a program was 8.0 months (SD = 8.3), with a range of 11 days to 58 months.

## **Indicators of Success**

In this study, outcomes were measured in terms of both objective and subjective indicators. Objective indicators were based on the students LBS levels in reading, writing, and numeracy. For the majority of the students that terminated involvement with their literacy program naturally within the course of this study, measures of LBS levels were available at intake and at exit. For each of the skill areas there were fewer students at levels 1 and 2 at exit than there were at intake, whereas for each skill area there were more students at level 3 at exit than there were at intake. The improvement

in reading, writing, and numeracy skills at exit was also indicated by the change in the average LBS levels from intake to exit from a program. Although the average increase in each skill area was small, each was statistically significant. Gaining employment could also be considered an indicator of success. Twenty three of the 106 students (22%) discontinued their involvement with a literacy program because they either found a new job or returned to a former one.

Strong support for the value of literacy training emerged from the subjective indicators of success. Virtually all students thought that attending their program was a good use of their time and that their skills in reading, writing, and math had improved as a result of their involvement in literacy training. Most of the students also reported improvements in a variety of functional activities related to basic skill areas, as well as in personal and adaptive activities (e.g., independence, self-confidence, and getting along with others). The majority of students were also of the opinion that they had attained their own specific learning goals related to each of the categories surveyed, which included reading, writing, numeracy, oral communication, self-management and self-direction, and keyboarding and computer skills. The majority of students also reported attainment of their adaptive goals, which included the categories of employment, training and education, and independence. In addition, the vast majority of students thought that their confidence in completing reading and writing tasks in daily life and in the workplace was higher than when they began the program.

Based on the results of the Learner Satisfaction Survey (MTCU), the majority of students either agreed or strongly agreed that they made good progress in reaching their goals, that the learning activities were useful in working towards their goals, that the staff of their agency explained the LBS program clearly, that they were treated fairly by the staff, and that the hours were convenient for them. Most considered in general that they were satisfied with their program and that they would recommend the program to others.

## **Program Practices**

There were several ways in which literacy programs were similar. All agencies reported having a Board of Directors (BOD), with the vast majority also having a job description for its members as well as bylaws related to the makeup of their board. Many, but not all, involved their board members in orientation to literacy issues. Most used similar methods for promoting their services and acknowledged flexibility in meeting the needs of their students. Similarities were also seen in the initial intake procedures, assessment practices, and means by which to evaluate student progress. Most encouraged students to take an active role in their learning, which included defining their own learning goals as well as involving them in program development and program evaluation.



However, there were differences in agency characteristics and program practices that related to outcome. A higher percentage of students made a net gain in their LBS skills than did not if they received at least some one-to-one instructions, whereas for those students who received group instruction only, more did not make a net gain than did. More students improved than did not if their program had diversified sources of funding. In contrast, more students did not improve than did if their programs received funding from MTCU only. Students did better if they attended an agency that was affiliated with one or more literacy organizations than if the agency was not. Students also did better if they attended an agency that had at least one full-time staff compared to students who attended an agency that had no full-time staff. In general, the findings also indicated that students did better if they attended an agency that required their practitioners, whether volunteers or paid instructors, to participate in training prior to tutoring or instructing. The advantage to students seemed clearest for practitioner training that was between 16 and 20 hours. A more favourable outcome was associated with student representation on the agency's Board of Directors and board member orientation to literacy issues.

Many of the agency factors associated with success reflected activities outside of direct service delivery practices. Orientation of board members to literacy issues, student representation on the BOD, diversified funding, and agency affiliation with provincial or national organizations were factors associated with better outcomes. These factors may reflect a greater connection to the literacy field more generally, as well as a greater sensitivity and commitment to literacy issues.

## **Student Characteristics**

There were few student variables that had a significant relationship to outcome. Perhaps not surprisingly, more students who were required to attend a literacy program in order to receive a monthly allowance did not show improvement than did. In contrast, slightly more improved than did not in net LBS level if they were not required to attend. The number of years of education was also related to improvement. Students who made a net gain in LBS level completed on average 10.2 years of schooling, whereas those who did not make a net gain completed an average of 8.6 years. On average, the students that made a net gain estimated at intake their reading level to be at the 8<sup>th</sup> grade, whereas those who did not make a net gain estimated their reading level to be around mid Grade 6. Certain employment variables were also associated with success. Working at the time of intake was associated with a better outcome. Also, students who made a net gain in LBS level had more paid jobs in the previous two years than students who did not make a net gain. Interestingly, the group of students who showed a net gain in LBS level rated their overall health as changing for the better between intake and exit. On average, their estimated level of health was higher than the group that did not show a net improvement in LBS level.

No relationship between other physical health or mental health variables and outcome was demonstrated in this sample. In addition, social connectedness, defined as the extent to which a student was in contact with family and friends, was not related to outcome. Although school achievement as measured by the last grade completed was related to outcome, other achievement-related variables were not. These included the number of times a student repeated a grade, whether a student received special education assistance in school, whether a student attended a university or college, and whether a student self-identified as having a learning disability.

## **Limitations of the Present Study**

It is important to consider that the sample used to examine outcome included only the 106 students (41% of the total number of participants) who entered and exited a literacy program during the relatively short timeline of the study. Fifty-one percent of the students were continuing their involvement in a LBS program. On average, the 106 students who exited naturally from the study spent 8 months in their literacy program. Overall, these participants may comprise a more resourceful subset of students and are not necessarily representative of the entire population of individuals that attend community based literacy programs. Although the outcome for students who take more time to complete a program may do just as well at completion, the present results cannot be generalized to this other group. Furthermore, it is possible that students who take longer to complete a program have greater training needs, as might be expected if the student had a learning or other form of developmental disability. Thus, students who require more intensive training to achieve a successful outcome may not be represented in this sample.

Another potential limitation is the use of LBS skill levels as the objective measure of outcome. Although significant improvements were seen, the degree of change was small, especially in relation to the overwhelming success and satisfaction based on subjective measures. Standardized measures of reading, writing, and mathematics might be more sensitive to basic skill gains in each of these areas and, consequently, provide a better correspondence to, if not an explanation of, the functional benefits that students are reporting.

## ***Recommendations***

1. Objective and, especially, subjective indicators of success provided strong evidence that community based literacy programs are highly valued by learners and are having a positive impact on their basic literacy and more general adaptive skills. Overall, program characteristics had a greater impact on student outcome than did student characteristics. To enhance successful outcomes, this would seem desirable in that literacy practices are easier to change than are the demographic characteristics that students bring with them to their literacy program. With this in mind, the findings from this project could become the basis for an agency's self-study. One of the goals would be to examine the agency's characteristics and program practices to determine the extent to which they reflect the factors of success identified in the current study. Undertaking such a self-study would be an indication of an agency's commitment to a best practices approach to literacy training.
2. One of the objectives of the FAS study was to promote a research culture in adult literacy. Several workshops at provincial conferences were conducted with this aim in mind. Feedback to the literacy field was provided at various stages of the project in order to keep the field apprised of developments and the corresponding research issues. With the project findings now at their fingertips, agency staff and other stakeholders might uncover questions or issues that are relevant to their own interests, programs, or community. The current project can serve as an example for future studies, highlighting key steps in conducting research, such as the importance of a literature review, funding, and sound methodology, to name a few. With the distribution of this report, it is expected that others in the literacy field will identify research issues of interest and be inspired to undertake their own projects designed to advance the literacy field.
3. A potential limitation of the present study was the short time frame within which to examine factors affecting success. Many participants were excluded from the analyses examining outcome because they had not yet completed their literacy program. Consequently, the findings from this study may be biased in that they do not reflect the outcomes over the longer term and their relationship to program and student characteristics. However, the current project provides the tools necessary to address outcomes more generally and in the longer term. These include the survey forms, project manual, and data base software with which to code the data. Tracking the progress of students over the longer term would be a natural extension of the current study.

4. The subjective indicators of success provided consistent and compelling evidence that community based literacy programs are effective, this despite the rather small improvements demonstrated in LBS skill levels. Why are students reporting such success in their functional skills? Perhaps the measure of basic skills used in the present study, which is required of community based literacy programs, is insensitive to meaningful changes in skill level, especially at Level 1 and Level 2. Perhaps actual gains in basic reading, writing, and numeracy are, in fact, small, but that students learn to make better use of their existing skills through various compensatory strategies. With the administration of a standardized measure of basic academic skills at intake and exit, such as the most recent edition Wechsler Individual Achievement Test or the Wide Range Achievement Test, finer changes in skill levels could be detected. This approach in conjunction with the methodology of the FAS Project would help address the relationship between gains in basic skill levels and the subjective reports of functional improvement.
5. The lack of an association between self-reported learning disabilities (SRLD) and gains in net LBS level in this study was counter-intuitive and inconsistent with the research literature. It is likely that individuals with SRLD are a diverse group. Although about a third of the total sample indicated that they had received a diagnosis of a learning disability (LD), most did not know who made the diagnosis or chose not to say. The current findings raise the question as to the accuracy of SRLD. Students with a “true” learning disability may have been under-represented in the sample of students who exited naturally from this study and over-represented in those who continued their literacy training beyond the study period or who were lost contacts. Given that problems in reading, writing, or numeracy in the context of at least average intellect are the core defining features of LD, it seems that an accurate diagnosis to guide literacy training is essential. A psycho-educational assessment is the foundation to an accurate diagnosis and to educational planning for a child suspected of having a learning disability. For an adult suspected of having a learning disability, a psycho-vocational assessment is the foundation to an accurate diagnosis and to vocational planning. Conducting psycho-vocational assessments on a random sample of individuals with and without SRLD would provide a more accurate estimate of the prevalence of learning disabilities in adults attending LBS programs and, more importantly, advance our understanding of the literacy training and vocational needs of adults with learning disabilities.