

Building Digital Skills: Increasing computer access to under-resourced youth in Canada



*“...universal home
the Internet is*

access to computers and

*within reach and is essential if computers are to become a
learning tool aimed at improving students’ skills.”¹*

Sky’s the Limit Youth Organization’s (STL) mission is to provide refurbished laptop computers to under-resourced students who cannot otherwise afford them in order to bridge the Digital Divide. STL is accomplishing this mission by acquiring gently used laptops and distributing them to under-resourced youth across Canada by partnering with Sapphire Technologies, IBM Canada, and Pathways to Education Canada among others. STL is a registered Canadian charity (BN: 857579742RR0001), an authorized “Microsoft Registered Refurbisher” (under the umbrella of the Microsoft Authorized Refurbisher program) and an Ontario Trillium Foundation Grantee.

Why laptops? Many of STL’s recipients live in small apartment buildings with many family members and have very little access to table or desk space to safely store a desktop computer. In addition, STL is able to keep costs down by shipping laptops across Canada relatively inexpensively from our office in Toronto as opposed to the costs of either shipping desktop computers or establishing new offices across Canada.

Various barriers exist across Canada that inhibit the development of digital literacy of under-resourced children and youth, leaving a significant portion of future Canadian ICT trained talent largely untapped. These barriers include: geographical, gender, language, education and socio-economic status (SES)². From studies conducted by Statistics Canada and other reputable research sources, it appears that SES is the largest barrier to computer and Internet access among youth, especially at home. According to Statistics Canada’s “Education Quarterly Review”;

“Children living in lone-parent families or families headed by non-parent guardians were much less likely to have a computer at home or Internet access...the odds of a child in a lone-parent family owning a computer were only 40% those of a child in a two-parent family, while the odds for a child in a non-parent guardian family were 33%.”³

STL directly targets this group by working with Pathways to Education Canada, as well as other award-winning Canadian charitable organizations, that have intimate knowledge of which youth do not have access to a working computer in the home.

¹ Statistics Canada, “Information and communication technology: Access and use,” *Education Quarterly Review*, Vol. 8, no.4, (2002): 14.

Lalita Acharya, *The Digital Divide* (The Library of Parliament, 2004): 3.

² Statistics Canada, “Information and communication technology: Access and use,” *Education Quarterly Review*, Vol. 8, no.4, (2002): 12

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Why a computer at home? Youth who have access to a computer at home affords them much more time to improve their computer and Internet skills than their counterparts who require public access.

According to Eric Fong et al at the University of Toronto;

“The use of the Internet at home implies that an individual typically has more opportunity to use the technology and for longer periods of time than if he or she uses it only at a school, library, or community center...unequal opportunities are created for those who use public Internet access sites compared to those who have access at work or at home, precisely because the latter group have had the Internet become integrated into their daily lives.”⁴

Additionally, many of STL's recipients live in priority areas that historically have very little access to libraries and community centers. For example, one of the newest Pathways to Education Canada locations, Scarborough Village (SV), identified in their application to STL that while approximately 40% of the youth they serve don't have access to a computer at home, there is no public library in Scarborough Village and only one community center with a handful of computers for public use. Below are some quotes from some of our deserving recipients that demonstrate their experience with this issue:

“My computer helps me to do my assignments and homework. If I go to the public library, most of the computers will get booked after 30mins so I will not have the time I need to finish my homework and assignments.”

“Thank you very much. I really appreciate the computer and it will really help me instead of going to the library to use the computers. This is a great advantage for me because I am in high school and they expect everything to be typed, not hand written.”

STL shares the Government of Canada's goal of “improving Canada's digital advantage”, specifically in the areas of “narrowing the digital skills divide”. As mentioned in the consultation paper by the Ministries of Industry, HRSD & CHOL;

“The Government of Canada has an overarching responsibility to ensure Canada's economic security and prosperity by: growing the labour force by reducing barriers; improving the quality of the labour force by supporting skills and development; and enhancing labour market efficiency through facilitating labour market and adjustment”

5.

The Government has already made significant strides to answering the above goals with initiatives like Focusing on Information Technology (FIT) and Computers for Schools. STL highly commends the Honourable Tony Clement, Minister of Industry, for recently delivering the one millionth computer to Computers for Schools in April. Having an access point to technology at school is an exceedingly vital step in order to remove barriers and support the development of Canada's future ICT leaders. STL's mission compliments this initiative and is a natural next step towards improving the digital literacy of Canadian youth, affording them the opportunity to practice the skills they learn at school and integrating technology into their daily lives.

Eric Fong et al. *Correlates of the Digital Divide: Individual, Household and Spatial Variation*. (Department of Sociology, University of Toronto, 2001), 36.

Government of Canada. *Improving Canada's Digital Advantage, Consultation Paper on a Digital Economy Strategy for Canada*, 2010), 33.

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STL is well situated to support the creation & implementation of a Digital Divide strategy and numerous synergistic approaches exist in which this potential alliance could take shape. For example, in the past STL has relied solely on fundraising to purchase computers from IBM, but new and more resourceful partnerships have arisen where donors send their used laptops to STL's IBM approved refurbisher, Bauer Systems Inc. Bauer Systems' professional refurbishers erase & wipe down all laptops so that all private data is completely removed, after which the appropriate software is then re-installed. Bauer Systems has agreed to provide this service for \$50 per unit, which is a fraction of the cost of purchasing a refurbished system at approximately \$300.

As part of both the Government's ICT and environment strategies, we propose that the Government advise companies to look to organizations such as ours to donate their laptops.

By donating laptops to STL, the companies would receive the following benefits:

- a) Laptops go to under-resourced youth with little or no access to technology in the home, which reduces barriers and supports the development of digital literacy.
- b) A tax receipt for the market value of their donation(s).
- c) Prominent recognition and exposure to STL's audience (primarily in the ICT industry) on all STL media including (but not limited to): STL's website, press releases, newsletters, annual reports, merchandise and signage at annual event.
- d) STL ensures re-use of laptops which will result in a reduction of the carbon footprint of the donor outlined below:

*"The average 24 kg desktop computer with monitor requires at least 10 times its weight in fossil fuels and chemicals to manufacture, much more materials intensive than an automobile or refrigerator, which only require 1-2 times their weight in fossil fuels. Researchers found that manufacturing one desktop computer and 17-inch CRT monitor uses at least 240 kg of fossil fuels, 22 kg of chemicals and 1,500 kg of water – a total of 1.8 tonnes of materials."*⁶

Assuming a 3 year life cycle for the computers that we donate, STL aims to provide as least a 50% extension to the usable lifespan of these devices by placing them with under-resourced recipients. Using this model, STL & its partners to date have saved approximately:

- 56,700kg of fossil fuels or 77,700L of gas
- 5,250kg of chemicals
- 350,700kg of water

Other benefits include that STL is the only award-winning organization of its size and scope in Canada whose mission is to provide under-resourced Canadian youth with refurbished laptops. STL is proud to have been recognized with the following awards & accolades:

- In 2008, Lara Tavares, Founder & Executing Director received the following awards and recognition:

⁶"Study tallies environmental cost of computer boom", *United Nations University*, Issue31: May-June (2004):1

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- 2008 FLARE Magazine Volunteer of the Year Award
- AronIMAGE award (Youth & Community)
- PricewaterhouseCoopers Individual Leadership Grant (\$2,000)
- STL was awarded "Best of North York" & "Best of Bayview" 2009 (Community Spirit & Public Eye) by Post City Magazines.
- Lara received the Harlequin More Than Words award in 2009 (\$10,000 USD).
- STL was chosen as an Ontario Trillium Foundation grantee on March 4th, 2010.
- STL placed its 2000th computer on Friday, April 9th, 2010.

In conclusion, Sky's the Limit Youth Organization and the Ministries of Industry, HRSD & CHOL, are uniquely positioned to make a significant impact on the digital literacy of Canadian youth.

STL already has the processes in place to continue to expand its reach to under-resourced Canadian youth. It would be of great benefit to STL if the opportunity were provided to meet the appropriate Ministry officials to determine possible ways to collaborate on how to achieve even greater outcomes. Together with the involvement of the Government of Canada, the potential impact of STL's programs increases exponentially, providing youth with one of the most important tools for their educational and future employability outcomes.

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