Prosper Canada

Financial Literacy Outcome Indicators

Phase I of 'Strengthening Financial Literacy Program Evaluation in Canada'

Sponsored by the Canadian Bankers Association

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Introduction

This report describes the development of a set of recommended outcome indicators that can be used by organizations engaged in financial education.

The outcome indicators comprise the first phase of a two-year project led by Prosper Canada and funded by the Canadian Bankers Association (CBA) to strengthen the evaluation of financial literacy programs in Canada. The project is a collaboration between Prosper Canada, the Government of Canada (led by the Financial Consumer Agency of Canada (FCAC), and the Canadian Bankers Association (CBA).

The second phase, to be carried out in 2016 and 2017, will involve the development of an online evaluation toolkit that enables organizations to select outcome indicators that best match their goals and activities.

Background

Prosper Canada, FCAC, and CBA have a shared interest in strengthening the evaluation of financial literacy programs in Canada.

Evaluation is critical to measuring impact, building knowledge of effective practice and supporting continuous improvement of programs. Prosper Canada and FCAC have consequently been actively exploring new ways to support organizations involved in financial education to effectively evaluate their financial literacy programs.

In 2010, Prosper Canada launched the *Financial Literacy Evaluation Project* (FLEP), a pan-Canadian initiative to support the effective monitoring and evaluation of community-based financial literacy activities. FLEP was funded by the Investment Industry Regulatory Organization of Canada. This project culminated in the creation of a *Financial Literacy Evaluation Resource Kit* tailored to the needs and capacities of community-based organizations serving Canadians with low incomes.

While this project represented a major step forward for the community sector, it had the following limitations:

- The FLEP Evaluation Resource Kit was designed specifically for use in evaluating community-based interventions targeting Canadians on low-incomes -- not for financial literacy evaluation more broadly;
- While efforts were made to integrate available research evidence, this was quite limited at the time, so the Resource Kit relied heavily on community practitioner perspectives of valid outcomes and indicators;
- The Resource Kit lacks the functionality necessary to enable organizations to select indicators that best match their programs’ goals and activities.

FCAC has developed a *Financial Literacy Evaluation Framework* (FCAC, 2015b) to help guide organizations through the various steps of an evaluation process, building on the FLEP project above and work undertaken by the Organization for Economic Cooperation and Development (OECD) in this area (OECD, 2015b).

Although these projects have made significant contributions to financial literacy evaluation in Canada, we still lack a common set of evidence-based evaluation metrics and a toolkit that can be used by financial literacy actors in all sectors and across all target populations.

Many organizations that provide financial literacy programming have limited expertise in program evaluation design and implementation and limited resources (financial and human) to dedicate to evaluation. When programs are evaluated, they often employ different outcomes, indicators, measures and evaluation methodologies, making comparisons of effectiveness across diverse interventions and program models very challenging.

In view of these limitations, Prosper Canada, FCAC and the CBA entered into a collaborative partnership to develop an evidence-based database of financial literacy outcomes, indicators and measures and an accompanying online toolkit to enable organizations engaged in financial education to develop their own tailored evaluation plan.

The Canadian Bankers Association (CBA) has generously provided funding for the initiative.

The Financial Consumer Agency of Canada (FCAC) is a strategic partner that will help ensure that the proposed evaluation metrics and toolkit align with and support the advancement of the *National Strategy for Financial Literacy* (FCAC, 2013).

In 2016 Prosper Canada will establish an Advisory Committee comprising CBA and FCAC representatives, as well as other financial literacy evaluators, practitioner experts and key stakeholders, to review key findings and provide feedback on the evaluation metrics and online toolkit.

The project was launched in July 2015. The final set of validated metrics and online toolkit will be completed by early 2017.

Objectives

The full two-phase project aims to benefit private, public and community-based organizations seeking to improve the financial literacy of Canadians.

The objectives of this phase of the project were to provide a well-curated 'menu' of outcome indicators that can be used for any financial literacy initiative in Canada, and that would:

- Make evaluation of financial literacy initiatives easier, more rigorous, and more likely;
- Focus funders and delivery organizations on shared, evidence-based outcomes and indicators;
- Make it possible to compare the effectiveness of diverse financial literacy interventions to identify what works best and for whom;
- Lay a foundation for the future online collection and comparison of national outcomes data.

Scope of the project

For the purposes of defining the scope of the indicators under consideration, we used a generic logic model for human services that maps out all of the elements that are (in theory) both necessary and sufficient to achieve a desired impact.[1] It comprises four sets of generic outputs and four sets of outcomes:

Outputs

Management – The extent to which the program is well managed, including financial and human resources

Activities – The extent to which the number and type of program activities are delivered according to milestones and at a sufficient level of quality

Reach – The extent to which the program reaches the targeted number and type of participants or audiences

Experience – The level of satisfaction or engagement from participants and stakeholders

Outcomes

KASA – Desired knowledge, attitudes, skills and aspirations for participants, target group members and/or service providers

Behaviours – Desired behaviours among the participants, target group members and/or service providers

Organizational practices – Changes in organizational policies, procedures and practices that are necessary to lead to the desired impacts

Impact – Desired impacts of the program on the beneficiary groups, covering all timeframes from immediate to long term

Based on a conceptual framework of financial well-being developed by Consumer Financial Protection Bureau (CFPB, 2015c), we identified the groups of indicators that would be needed to evaluate financial education programs for every output and outcome area in a comprehensive evaluation framework (see list below).

Then based on the stated objectives of the project, we narrowed the scope to three outcome areas: Impact, Behaviour and KASA (Knowledge, Attitudes, Skills, Aspirations) (***bold and italicized elements in the list below***). The project's scope did not include outcomes related to organizational policies (e.g., regulatory practices, tax policy, staff training at financial institutions), and nor did it address indicators relating to the behaviours of service providers (e.g., staff at community agencies, financial advisors at banks). In addition, the project did not address outputs such as demographic breakdowns of persons reached by programs, participant satisfaction, program fidelity or delivery of program activities against milestones. All of these elements are essential for evaluation frameworks, and may be addressed in future phases of Prosper Canada's work.

References for the logic model below are: (1) Index of Well-Being in Canada: Financial Security (Employment and Social Development Canada, 2015); (2) Financial well-being: The goal of financial education (CFPB, 2015c); (3) Prosper Canada's logic model, internal document.

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[1] The generic logic model was developed by Kerr for the purposes of defining indicators for use in shared measurement systems. Outcomes are categorized by concept (behavior, organizational practices) rather than by time scale (short-term, long-term).

FOUR SETS OF OUTCOMES FOR FINANCIAL EDUCATION PROGRAMS

Impact

1. ***Adequate income (includes access to government entitlements and benefits) (1)***
2. ***Control over day-to-day, month-to-month finances (2)***
3. ***Capacity to sustain a financial shock (2)***
4. ***On track to meet financial goals (2)***
5. ***Financial freedom to make choices to enjoy life (2)***

Organizational practices

6. Government policies support financial security and consumer protection (3)
7. Financial institutions offer appropriate services to people on low incomes (3)
8. Community organizations provide appropriate supports for financial empowerment (3)

Behaviour

9. ***Effective routine money management (2)***
10. ***Financial research and knowledge-seeking (2)***
11. ***Financial planning and goal-setting (2)***
12. ***Following through on financial decisions (2)***
13. Providing accurate, accessible and relevant financial information (for service providers) (3)

Knowledge, Attitudes, Skills, Aspirations (KASA)

14. ***Knowing when and how to find reliable information to make a financial decision (2)***
15. ***Knowing how to process financial information to make sound financial decisions (2)***
16. ***Knowing how to execute financial decisions, adapting as necessary to stay on track (2)***
17. ***Believing in ability to influence own financial outcomes - financial self-efficacy (2)***
18. Learning how to work effectively with people at risk (for service providers) (3)
19. Learning relevant and accurate information (for service providers) (3)

FOUR SETS OF OUTPUTS FOR ANY HUMAN SERVICES PROGRAM

Experience

20. Participants are engaged with the program (3)
21. Stakeholders are satisfied with the program (partners, funders, community members) (3)

Reach

22. Program reaches the targeted number and type of beneficiaries (3)
23. Program reaches the targeted number and type of organizations and service providers (3)

Activities

24. Targeted number and type of products and services are delivered (3)

Management

25. The programs are delivered at an adequate level of quality (3)
26. Resources are used efficiently to manage the program (3)
27. Program design is informed by evidence of efficacy and cost effectiveness (3)
28. Staff and volunteers are managed well (includes HR policies, staff engagement) (3)

Methodology

We used a multi-disciplinary approach to ensure that the indicators would meet the project's objectives. Since this project is only one in a series under Prosper Canada's and LogicalOutcomes's evaluation capacity-building initiatives, several of the following activities overlapped with other projects. More detailed information on methodology and findings may be obtained directly from the authors.

1. **Scan of the research literature** related to financial literacy and empowerment outcome indicators based on a review carried out for Prosper Canada (Kerr, 2014).

   The review identified outcomes of financial literacy and empowerment as well as the measurable factors underlying good financial decision-making. This internal report was supplemented by an unpublished literature review of financial outcome measures by the United States Consumer Financial Protection Bureau (CFPB, 2015b).

2. **Review of success factors relating to monitoring and evaluation systems**, focusing on shared measurement systems, based on a study that was carried out in early 2015 by LogicalOutcomes (Kerr, 2015; Kerr & McGuire, 2015).

   The study involved a requirements analysis of features for monitoring and evaluation (M&E) software; a scan of the literature on challenges of implementing evaluation systems; interviews with more than 40 implementers and vendors of M&E systems in nonprofits; a comparison of 24 software programs based on the requirements; and a review of international metadata standards relating to evaluation.

3. **Interviews with experts in the field** of evaluation in financial literacy and empowerment. The interview protocol and list of interviewees are listed in the appendix.

4. **Review of measurement instruments and indicators** against defined criteria for indicators.

   We identified several indicators, survey instruments and data collection tools from interviews, the literature review and from Prosper Canada's networks. We screened them down to a collection of questions that were free for nonprofits to use, had been through some form of testing, and that had been shown to relate to financial literacy/empowerment outcomes. We then assessed each instrument using the criteria developed by the international initiative to harmonize essential health indicators across the globe (Oomman, Mehl, Berg, & Silverman, 2013). Each individual indicator was then rated on each criterion by at least one person on the project team.

5. **Development of a format for defining indicators** using international metadata standards to ensure that they could be implemented and shared across organizations.

   We reviewed international metadata standards for indicators and designed a descriptive framework that will enable agencies to use the project's indicators in any evaluation system and combine and aggregate the data across systems.

The next step for Prosper Canada will be to consult with researchers, practitioners and evaluators regarding the indicators' technical quality and usefulness in practice. A working group will review the indicators and recommend changes to the draft list. The updated list of indicators will be incorporated into Prosper Canada's evaluation tool and will also be available in spreadsheet format.

Findings

About the difficulty of defining financial literacy outcomes

There is no shortage of research on indicators of financial literacy, financial inclusion and financial decision making. Several recent international reviews are available online (Lusardi & Mitchell, 2011; World Bank, 2013a, 2013b); the Organisation for Economic Co-operation and Development (OECD) is engaged in a major initiative to define measures for financial literacy (OECD, 2015b); and the United States Consumer Financial Protection Bureau has reviewed the literature on financial outcomes (CFPB, 2015b) as background to its list of recommended indicators (in preparation).

'Financial literacy' applies to a huge range of applications, from wealthy individuals selecting investment portfolios to families in developing nations trying to survive on a few dollars a day. Studies of financial literacy include:

- national population surveys
- analyses of economic indicators like bankruptcies and foreclosures
- consumer opinion polls about debt and savings
- academic studies of spending and savings behaviour
- evaluations of financial education programs

The concept of 'financial literacy' overlaps with other outcomes relating to financial security, financial well-being, financial capability and financial empowerment. Measures of financial outcomes in academic research have included, among many others, "savings rates, debt levels, wealth accumulation, delinquency and bankruptcy rates, credit scores, investment strategies, account enrollment, homeownership, and participation in retirement savings plans" (Lyons, Palmer, Jayaratne, & Scherpf, 2006), as well as ratios for "adequacy of emergency funds… overall savings or overspending rates …, changes in net worth over time …, and housing expense and affordability" (Greninger, Hampton, Kitt, & Achacoso, 1996), and of course financial knowledge questions on budgeting, interest rates and so on (FCAC, 2015a; OECD, 2015a; Prosper Canada, 2013).

Despite the wealth of financial literacy measures available in the literature, *most measures used in financial literacy studies are not appropriate for monitoring and evaluation purposes*. This is a fundamental point. All of the concepts measured by these studies may be relevant to the understanding of financial literacy, but most of the measures are unstandardized and have not been developed for the purposes of evaluating financial education programs. Studies that do rely on standardized measures (e.g., those based on responses to national population surveys like Statistics Canada's Canadian Financial Capability Survey) are generally attempting to understand the decisions and capability of individuals or populations, not the relative success of education programs.

For this project we needed to find measures and indicators that would lead to improvements in the delivery and impact of financial education programs, which required a search of instruments that had been developed or tested with that objective. Furthermore, we needed to identify indicators that were clearly enough defined and standardized that they could be collected and analyzed on a broad national scale. The indicators would need to be supported by academic or policy research that demonstrated their usefulness and cost-effectiveness in a program setting. In other words, we needed to find validated indicators for use in improving financial education programs.

Challenges raised in our interviews[2] and the literature include:

- There are important differences between the constructs of financial literacy, financial empowerment, financial inclusion, financial health and well-being, (Bone, 2008; CFPB, 2015c; Remund, 2010; World Bank, 2013b). However, these differences are often subtle and not easily understood by program managers. Indicators that are recommended for widespread use should be relevant to a range of theoretical frameworks and program logic models.
- There is intense controversy about the extent that financial knowledge translates to better decisions and outcomes (Hastings, Madrian, & Skimmyhorn, 2013). The new field of behavioural economics has shown that the 'decision context', including organizational practices, may be far more effective in changing financial outcomes than knowledge *per se* (Altman, 2012; De Meza, Irlenbusch, & Reyniers, 2008; Willis, 2011). In fact, 'financial literacy' may be too limited as an overriding construct when it comes to improving the financial well-being of Canadians. Yet financial capability initiatives still tend to downgrade environmental and policy contributions to financial health, as can be seen by the diagram below:

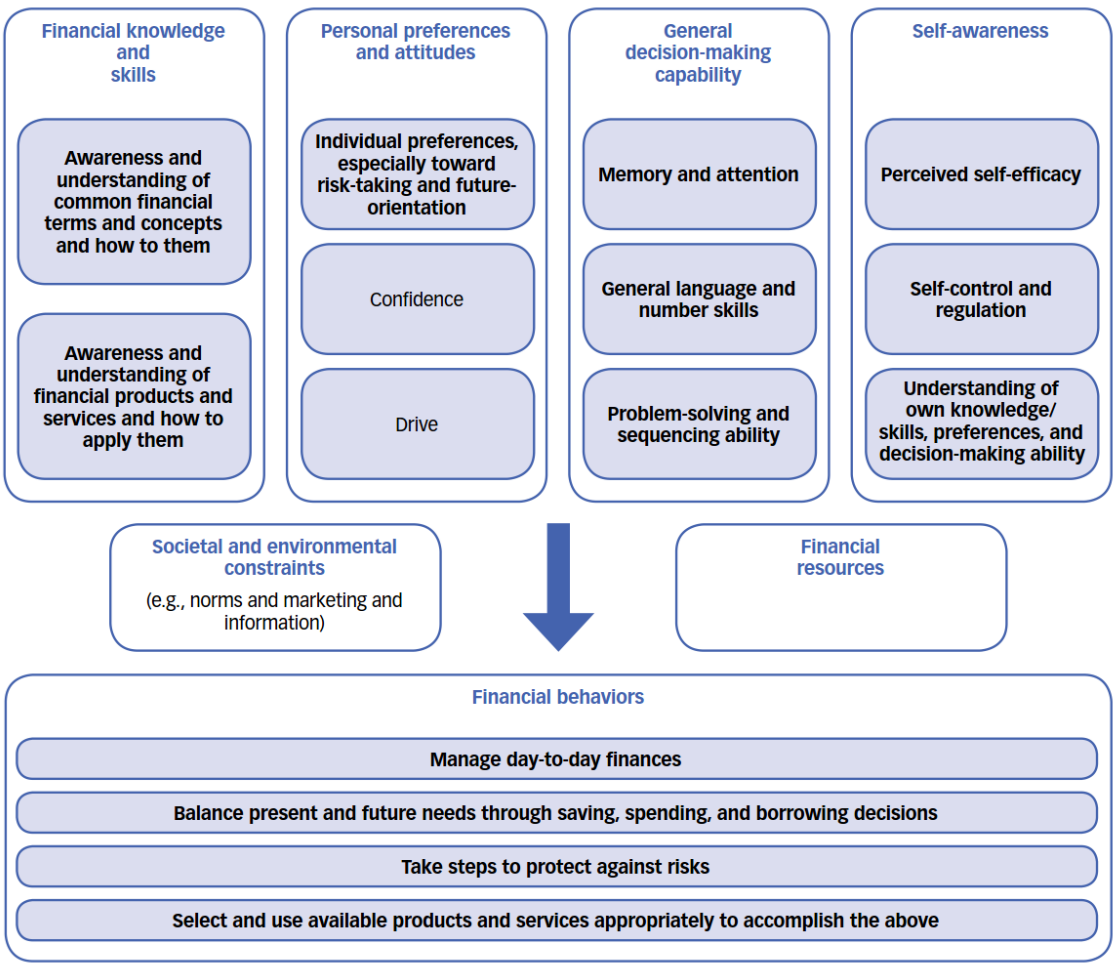


Figure 1- A conceptual model of financial capability (World Bank, 2013a)

[2] See the interview protocol and list of interviewees in the appendix.

In the conceptual model above, financial capability is based on a complex set of skills, including general numeracy and problem-solving ability. Financial capability is certainly useful in decision-making, by definition, but the research field is struggling with the relative contributions of individual knowledge and skills versus decision supports in the environment. The implications for financial indicators? We should emphasize the measurement of behaviours and impacts over knowledge and skills unless there is clear evidence that the knowledge and skills leads to the desired impacts.

- Recommendations that are helpful to people living on very low incomes may be completely inappropriate for people living in middle or high incomes, and vice versa. Adults over 40 years old living in poverty should almost never be advised to use an RRSP as a retirement savings vehicle (Stapleton, 2009, 2014). And see the following list of “financial mistakes discussed in the literature”, many of which are irrelevant to someone living on a very low income:

> Purchasing whole life insurance rather than a cheaper combination of term life insurance in conjunction with a savings account (Anagol et al. 2012); simultaneously holding high-interest credit card debt and low interest checking account balances (Gross & Souleles 2002); holding taxable assets in taxable accounts and non-taxable or tax-preferred assets in tax-deferred accounts (Bergstresser & Poterba 2004, Barber & Odean 2003); paying down a mortgage faster than the amortization schedule requires while failing to contribute to a matched tax-deferred savings account (Amromin et al. 2007); and borrowing from a payday lender when cheaper [sic] (as cited in Hastings et al., 2013).

Conventional wisdom on good financial decisions sometimes changes as the economy shifts. The relatively new research field of retirement income planning is developing its own outcome measures based on different assumptions than those driving conventional investment planning (Pfau, 2012). Advanced financial literacy skills are both complex and controversial. Some outcome measures, such as a checklist of ‘financial mistakes’ to avoid, may be controversial or have minor impact on financial well-being:

> Campbell (2006) highlights several other financial mistakes: low levels of stock market participation, inadequate diversification due to households’ apparent preferences to invest in local firms and employer stock, individuals’ tendencies to sell assets that have appreciated while holding on to assets whose value has declined even if future return prospects are the same (the disposition effect first documented in Odean 1998), and failing to refinance fixed rate mortgages in a period of declining interest rates. (as cited in Hastings et al., 2013)

- There is tension between technical rigour, standardization and usability of indicators that reflected the different priorities of user groups. Several interview informants talked about the struggles between academically inclined evaluators who wanted evidence-based, valid indicators versus front-line practitioners who were more concerned about accessibility, meaningfulness and ease of use, versus senior managers who were pushing for more professionalization of financial education programs through the incorporation of standard, well-designed measures that ensured consistent quality and program fidelity.

About designing indicators for shared measurement systems

This project aims to develop indicators that can be collected by organizations throughout Canada and that can eventually support the reporting of comparable data. It is a step towards a national shared measurement system. Shared measurement systems require a process of clarifying and standardizing indicators across multiple jurisdictions, which is increasingly common in the international health sector (Oomman et al., 2013) and which is sometimes called ‘harmonization’. Statistics Canada is an international leader in harmonization and the definition of cross-sectoral metadata – and it’s not easy (Priest, 2010).

Standardization of indicators typically involves a formal and transparent process of selecting a core set of well-defined measures that can be used by a wide range of organizations to improve services (Gagliardi & Brouwers, 2015; Gagliardi, Brouwers, & Bhattacharyya, 2015; Goldet & Howick, 2013). A working group of experts and stakeholders reviews and rates indicators according to defined criteria. As inspiration for our own process, we looked to several international initiatives: The harmonization of health registries (Frøen & Temmerman, 2013; Oomman et al., 2013), the emerging standards for indicator metadata (PEPFAR, 2015; World Health Organization, 2011); the GRADE approach to identifying outcomes and interventions (Brouwers et al., 2010), and the metadata dictionary of the Australian Government (“About METeOR,” n.d.).

To select and rate indicators, we selected five criteria defined by the Harmonized Reproductive Health Registries Working Group [action-focused, important, operational, feasible, simple and valued - see Criteria for Indicators section below], which have large overlaps with other credible sources:

AHRQ *(Agency for Healthcare Research & Quality, 2001)*	***AIMS criteria*** *(The New Economics Foundation, 2000; UNAIDS, 2010)*	***SMART criteria*** *(Department of Human Services & Community Health Services South Australia, 2002)*	***WHO*** *Desirable scientific qualities of health indicators (WHO, 1994)*
Face validity	*Action focused*	*Simple*	*Valid*
Precision	*Important*	*Measurable*	*Reliable*
Minimum bias	*Measurable*	*Achievable*	*Specific*
Construct validity	*Simple*	*Realistic*	*Sensitive*
Fosters real quality improvement		*Timely*	*Operational*
Application			

Figure 2 From Harmonized Reproductive Health Registries (hRHR) Working Group (Wojcieszek et al., 2014)

We selected the five hRHR criteria because they were designed specifically for harmonizing indicators across regions and organizations. We added a sixth criterion - open access – which was not explicitly addressed in the Harmonized Health Registries but was implicitly included, in that the authors assumed that indicators would be freely available for use.

We created a rating sheet with a heatmap for scoring each indicator against the six criteria, and at least one project team member rated every indicator (the rating sheet is available from Prosper Canada). Note that the project team did not include subject matter experts in financial literacy, so the ratings were rather superficial. In the next stage of the project – expert consultation - indicators should be rated by experts in the field.

Name:	
Date:	

Indicator	Survey question (Data element)	Answer options	Open access	Action Focused	Important	Operational	Feasible	Simple and valued
			Yes=No restrictions on use or derivatives No=Not open access Some=Some restrictions	"It is clear what needs to be done to improve outcomes associated with this indicator (e.g., immunise to reduce neonatal tetanus)"	"The indicator and the data generated will make a relevant and significant contribution to determining how to effectively respond to the problem"	The indicator is quantifiable; definitions are precise and reference standards are developed and tested or it is feasible to do so"	"It is feasible to collect data required for indicator in the relevant setting"	"The people involved in the service can understand and value the indicator"
			Click below to score	*Click below to score*	*Click below to score*	*Click below to score*	*Click below to score*	*Click below to score*
Change in satisfaction with financial situation	(How satisfied are you) with your fi	Very satisfied Satisfied Neither satisfied nor dissatisfied Dissatisfied Very dissatisfied RF DK	Yes	Don't know	Probably	Yes	Yes	Yes

Figure 3 Indicator rating sheet: The entire spreadsheet is available from Prosper Canada. The colours of the cells represent scores, where dark blue = yes, light blue = probably, red = no and white = don't know.

For indicator definitions, we adapted the format used by GAVI Vaccine Alliance (GAVI, 2015), PEPFAR (PEPFAR, 2015), and the World Health Organization health indicators (World Health Organization, 2011). See the two samples of Indicator Reference Sheets in the appendix.

Criteria for indicator selection

We went through three stages in rating indicators:

- We identified potential instruments and measures through a review of the literature and interviews with leaders in the field (see list of informants in the appendix). We considered only instruments that had credibility in terms of publication in policy or academic research, or that were being used by recognized experts in the field.
- We briefly screened the instruments and measures on their relevance for evaluating financial education programs serving individual Canadian adults living on low or middle incomes. In other words, we did not consider children or youth, nor population-wide interventions, nor indicators that were only relevant to high-income Canadians (defined here as those who could reasonably be expected to hire their own professional financial advisers).

  We asked, (a) Were they designed specifically for the evaluation of adult financial education programs or, if not (b) could they be used to evaluate financial education programs in their current form, without significantly revising the wording? See the section on 'Rejected Indicators' below for examples of our rationales.
- We then used six criteria to rate indicators according to their 'goodness' for measuring outcomes of financial education programs.

The criteria were as follows:

1. **Action focused**

   "It is clear what needs to be done to improve outcomes associated with this indicator"[3]. For example, if the indicator measures level of debt, it implies that the program should help participants reduce their debt levels. This is where a well-articulated theory of change becomes

[3] All quotes in this section are taken from a presentation on harmonized health indicators (Wojcieszek et al., 2014).

essential. If your program's program theory includes a feeling of hopefulness and a sense that life is meaningful, you would select indicators that address mental health, and would use the resulting data to improve your program activities.[4]

For the purposes of this project, we rejected indicators that could not meaningfully be used in pre-post designs in community agencies.

2. **Important**

   "The indicator and the data generated will make a relevant and significant contribution to determining how to effectively respond to the problem." It is not enough that an indicator is relevant to the issue – it must be important, and there must be evidence that the data collected by the indicator will indeed help the agency or funder provide more effective services.

3. **Operational**

   "The indicator is quantifiable; definitions are precise and reference standards are developed and tested or it is feasible to do so." We did not include indicators that we found confusing or too vague to be compared across organizations. Most qualitative questions did not meet this criterion – they are often extremely useful at an agency level, but are difficult to use across organizations and thus do not address the objectives of this project. We did, however, include a qualitative question for 'Most Significant Change' to encourage the collection of participant perspectives about what is most important to them.

4. **Feasible**

   "It is feasible to collect data required for indicator in the relevant setting." This criterion addresses the issue of usability, and includes linguistic comprehension, reading literacy, the difficulties of collecting survey data months after the program has completed, and the cost of analyzing complex indicators.

5. **Simple and valued**

   "The people involved in the service can understand and value the indicator." This criterion is often called 'face validity', and refers to the extent that decision-makers and stakeholders think the indicator matters. If decision-makers do not value the results of an indicator, it probably isn't worth collecting the data.

6. **Open access**

   The indicators should be freely available to use and share across organizations without cost and without going through a process of obtaining written permission from the authors. At the very least, the indicators should be free to use for noncommercial use as long as attribution is given. Preferably there should be no restrictions for use and revisions, since many small service providers and social enterprises are not incorporated as nonprofits and would not be covered under 'noncommercial use'. Preferably the licensing should allow derivative works (i.e., revising the wording of the survey questions) to allow for language translation. However, some indicators have been carefully validated for wording and administration, and so we permitted

[4] In that case, we suggest you consider additional questions drawn from Statistics Canada's Community Health Survey (Government of Canada, 2015).

'no derivatives' licenses[5]. Each indicator will be labelled with its respective terms of use in an Indicator Reference Sheet (see Indicator Reference Sheet section below for two examples).

Needed: A process for updating indicators

Good indicators are a moving target. Several organizations are in the process of developing or revising indicators for financial wellness, financial empowerment and/or financial literacy, including the Consumer Financial Protection Bureau, and new evidence from the field of behavioural economics is transforming our understanding of how and why people make financial decisions.

In addition, this phase of the project intentionally did not include many important elements of a full evaluation system for financial empowerment. It focused entirely on outcome indicators for individual adults and did not address measures for children and youth or for organizational practices, regulatory frameworks and financial policies. Nor did it address questions on client satisfaction, demographics, program activities, etc. (though Prosper Canada's Financial Literacy Evaluation Toolkit (Prosper Canada, 2012b) did include many of those elements, and future phases of this initiative may incorporate them).

We recommend that Prosper Canada and its partners institute a process for updating and adding indicators, including:

- an expert review process that rates potential indicators against technical criteria
- a stakeholder group representing practitioners who screen indicators for appropriateness and accessibility for the communities they serve

The indicators

How to use the indicators

In the next phase of this project, Prosper Canada will develop online tools to help agencies to select indicators and develop their own evaluation frameworks. Instructions for selecting indicators will accompany the online tool, and may describe a process like this:

a. Organizations will select outcome categories that match their program's goals and theory of change. Some programs may focus more on managing consumer debt and savings, while others may emphasize progress against personal financial goals.

b. Organizations will define how they intend to use the indicators – as an end-of-program evaluation to report results to funders, or as input for ongoing program improvement. We recommend that indicators be used for both purposes. If the latter, organizations will be guided toward indicators that give regular feedback and enable program staff to review the data frequently with a view to making changes throughout the year. Generally, knowledge and skill questions are useful for short-term measures that can be collected throughout the program, while data on financial impacts are collected months after the program is finished and are not as good for real-time program feedback.

[5] For more information on licensing and terms of use, see the Creative Commons web site. For licenses, we recommend Creative Commons Attribution 4.0: http://creativecommons.org/licenses/by/4.0/), Canada's Open Government License (http://open.canada.ca/en/open-government-licence-canada), and the Open Licenses policy of the U.S. federal government (https://project-open-data.cio.gov/open-licenses/).

c. Organizations will be offered a recommendation of one or two instruments (not individual questions) that are the best match for their objectives. The online tool will likely recommend an instrument that is as brief as possible to minimize the burden of data collection (e.g., a well-constructed 4 question scale (Collins & O'Rourke, 2013) rather than a 20 page survey).

d. Organizations will then be able to add additional stand-alone indicators if they would add significant value to offset the cost. For example, the *Most Significant Change* question (see below) invites participants to describe what change was most important to them, and provides rich qualitative data from the perspective of the people who are being served.

e. Once organizations have made an initial selection of indicators, they will be able to create sample data collection tools (e.g., a participant survey) to allow a review for clarity and appropriateness.

We assume that someone in the agency, perhaps a manager or consultant, has experience with evaluation and can understand how to compare and implement indicators in a measurement system. Evaluation is a technical field and requires the same level of expertise in measurement and reporting as, say, an accountant's expertise in designing financial reports.

That said, the indicators should be meaningful to program managers and front-line staff even if they do not read the 'methods of measurement' sections in an Indicator Reference Sheet (see Indicator Reference Sheet section below). Agencies should consult with their staff and participants to ensure they make sense to them before finalizing indicators.

The instruments

We identified eight instruments that measure outcomes relevant to Canadian adult financial education programs and that met our criteria well enough to be included. They are described below.

In addition, we identified several instruments that are still in development or were suggested after the nomination period had passed. They may be considered in future drafts of the indicator list. They include:

- OECD/INFE Financial Literacy and Financial Inclusion Measurement Toolkit (OECD, 2015a).
- Milestones and Outcomes, Cities for Financial Empowerment Fund (CFE). CFE has a list of objectively verified behavioural outcomes such as 'decrease total debt by at least 10%' that are used in financial coaching programs.
- Personal Financial Literacy Quiz, in development by Jennifer Robson, based on items from the Canadian Financial Capability Survey.
- And possibly selected questions from the very lengthy and comprehensive 'Success Measures Tools for Practitioners' (NeighborWorks America, 2011).

It will be necessary in the next phase of consultations to define guidelines for including or rejecting instruments and indicators, and also for recommending the choice of one over others.

Australian Financial Attitudes and Behaviour Tracker, Australian Securities & Investments Commission

The Australian Securities and Investments Commission, the Australian equivalent of the Government of Canada's FCAC, recently launched a national survey of financial attitudes and behaviours (ASIC, 2014). The tracker was developed to inform financial literacy programs and initiatives for adult Australians, and supplements the ANZ Survey of Adult Financial Literacy in Australia which is carried out every three years.

The tracker provides a snapshot of key financial attitudes and behaviours at regular intervals and covers five factors of financial literacy:

- Keeping track of finances – approaches to managing everyday expenses
- Planning ahead – planning for the medium and longer term, including retirement and beyond
- Choosing financial products – shopping around and understanding and assessing investment risk
- Staying informed – use of information, tools and guidance when needed
- Financial control – savings behaviour and managing debts

The survey questions include items that are relevant to higher-income respondents (e.g., questions about investments) and thus fill some gaps from the other instruments. In addition, the questions cover a 6 month timeframe rather than the 12 month timeframe of most Statistics Canada surveys and so are more feasible in pre-post designs.

Canadian Community Health Survey, Statistics Canada

Statistics Canada carries out a major population health survey every year that includes a wide range of questions on health and well-being. The number of items varies according to the year. We have identified questions that can be included in outcome measures for any community agency, to ensure that issues relating to finances are being considered when working with people living on low incomes. (Government of Canada, 2015)

Two questions are selected out of a large population survey covering dozens of topics (including health conditions, smoking, exercise, food security, waiting times for health care, etc.).

CFPB Financial Well-Being Scale

[Excerpted from CFPB, 2015a] The CFPB Financial Well-Being Scale contains 10 questions [and an abbreviated 5-item version]. These questions were selected through a state-of-the-art process that involved:

- A series of cognitive interviews to ensure that people understand the questions and what they are designed to ask.
- Factor analysis to select the questions that best measured the underlying concept of interest.
- Three rounds of psychometric testing with over fifteen thousand respondents in order to select the questions that provided the greatest reliability across adults.

[The] scale incorporates consumers' perceptions of financial well-being to deliver a single financial well-being score that captures the four elements of financial well-being. The scale is constructed so that it is possible to compare different people's scores directly, or to see how an individual's financial well-being changes over time.

The CFPB Financial Well-Being Scale can be used in a variety of ways, including:

- Initial assessment: The scale can be used to assess a person's financial well-being at intake. In addition, reviewing individual questions that make up the scale with a person that you serve could also help guide a conversation about their financial situation, both strengths and needs, in terms that resonate with and motivate consumers. -
- Tracking individual progress: The scale can be used to track changes in an individual's financial well-being over time. While not providing the same quantifiable measure of progress as a financial well-being score, changes in answers to individual items may provide additional, more nuanced insights into how individuals are experiencing their financial situation over time. Such changes may highlight an individual's progress in taking more control over money management, or building stronger protections against financial shocks.
- Assessing program outcomes: The CFPB Financial Well-Being Scale provides a tool to measure the extent to which programs are improving the financial well-being of the individuals that they serve. The scale could be used as part of reports on the effectiveness of programs and services, such as financial education and capability programs. It can also be used to compare different populations in one program—for example, how a particular intervention differentially affects different people—or to compare changes in financial well-being across programs.
- Financial well-being survey research: The scale can be used in survey research to analyze the relationship between financial well-being and other factors.

A full methodology report will be available in the future.

All questions out of a total of 10 items response were selected from this instrument.

Financial Capability Scale, University of Wisconsin-Madison

The University of Wisconsin-Madison's Center for Financial Security developed an instrument to assess financial capability in 2011. The instrument, an eight item survey, was created from the findings of the "Financial Coaching Outcomes Measures Project" that sought to define a short list of standardized measures reliable enough to be considered benchmarks for assessing one's financial health. Four organizations (Bon Secours, the Financial Clinic, LISC Chicago and the University of Wisconsin-Extension) aggregated their data for client outcomes, in order to identify which measures were consistently used across service providers. The data was then assessed to determine which measures were reliable and valid for evaluating one's financial health. Once the eight measures were identified, they were again tested both individually and as a composite scale using cross sections of aggregated data from the four organizations to determine their predictive ability for an area of financial health. This scale is designed and validated specifically to assess outcomes of financial counselling interventions (Asset Funders Network, n.d.; Collins & O'Rourke, 2013).

All questions out of a total of 8 items plus a qualitative response were selected from this instrument.

Financial Health Metrics, Center for Financial Services Innovation (CFSI)

The Center for Financial Services Innovation, as a next step following the release of their Consumer Financial Health Study (Center for Financial Services Innovation, 2015a), identified eight indicators that would adequately assess financial health. Originally, over 20 indicators were identified through the review of data collected from interviews with subject matter experts and other stakeholders, and corroborating the study's findings against that of 20 external consumer finance studies. This list was then refined down to eight key indicators that would give an adequate overall view of a person's financial health.

Each indicator has two forms of metrics that collect financial data and survey data respectively. The financial data is collected by the counsellor or coach based on a review of documents, such as bank statements, while survey data are based on self-reports from the participants. Choosing which metric to use will depend on a service provider's needs. Overall, financial data has a more quantitative focus that will objectively assess a person's behavior. Survey data relies on self-reported behaviour and also asks about the attitudes and perceptions a person holds about their financial health. The indicators can be used individually, or as a composite scale. Similarly, the metrics for each indicator can be used separately or in tandem with each other. Obviously, the more indicators and metrics that are gathered, the more comprehensive the picture of an individual's financial health. Questions are drawn from or inspired by a variety of sources. (Center for Financial Services Innovation, 2015b)

40 items were included in the list of indicators, out of a total of 41. Note that many items in this instrument are answered by a counsellor on the basis of a document review (e.g., bank statements) rather than survey questions to participants. And note that this instrument is still in draft format and will be finalized in spring of 2016.

Financial Literacy Evaluation Resource Kit, Prosper Canada

These questions were taken from a set of evaluation tools developed by Prosper Canada and funded by the Investment Industry Regulatory Organization of Canada (IIROC) in 2011-2013 to enable community organizations to measure, report on, and enhance the impact of their financial literacy education activities. The tools include pre-post surveys to measure outcomes as well as consent and release forms, demographic questionnaires, draft logic models and so on, and are available on Prosper Canada's web site. The survey questions were developed through a national consultation process including service providers and academic advisors. The tools were intended to provide a common set of evaluation instruments for Canadian community organizations providing financial services to adults living on low incomes. (Prosper Canada, 2012b) See http://prospercanada.org/Resources/Financial-Literacy-Evaluation-Tools/Tracking-Outcomes.aspx

13 questions were taken from a post-intervention survey of 36 items.

Financial Literacy Self-Assessment Quiz, Financial Consumer Agency of Canada (FCAC) and Canadian Financial Capability Survey, Statistics Canada

The FCAC's "Financial literacy self-assessment quiz" is a 30-item questionnaire that assesses an individual's financial literacy skills and knowledge. The questions were taken from the Canadian Financial Capability Scale, a national survey carried out by Statistics Canada (Statistics Canada, 2014). Many of the questions from the FCAC quiz are also included in a 'Personal Financial Literacy Quiz' developed by Prosper Canada and included in their Financial Literacy Evaluation Resource Kit (see above).

The Canadian Financial Capability Survey (CFCS) 2014 sheds light on Canadians' knowledge, abilities and behaviour concerning financial decision-making - in other words, how Canadians understand their financial situation, the financial services available to them and their plans for the future. The survey is designed to collect information surrounding respondents' approaches to day-to-day money management and budgeting, longer term money management and general financial planning.

The CFCS was designed to be collected by telephone interview. A first round of cognitive testing, including one-on-one interviews and focus group discussions, across Canada in spring 2007 confirmed that this was indeed the best way to proceed. With the addition of Finance Canada and the Bank of Canada as active partners, the content was modified to reflect each of the partners' data needs. This led to a second round of cognitive testing in only a few selected cities in the spring of 2008. The computer-assisted telephone interviewing (CATI) application was developed and tested during the summer and fall months in 2008. In an attempt to maintain comparability, the 2014 Canadian Financial Capability Survey has kept the 2009 CFCS's content intact, making only very slight updates where necessary. The 2014 application was then re-developed and tested in the early months of 2014 (Arrowsmith & Pignal, 2007), (Arrowsmith, Pignal, & Kleim, 2006).

6 questions out of a total of 29 were selected from the Financial Literacy Self-Assessment Quiz.

Most Significant Change Technique

Most Significant Change (MSC) is a qualitative technique for participatory monitoring and evaluation that is widely used in front-line services in developing nations (Dart & Davies, 2003).

> SC [Significant Change] stories are collected from those most directly involved, such as participants and field staff. The stories are collected by asking a simple question such as: 'During the last month, in your opinion, what was the most significant change that took place for participants in the program?' It is initially up to respondents to allocate their stories to a domain category. In addition to this, respondents are encouraged to report why they consider a particular change to be the most significant one. (Davies & Dart, 2005)

As a participatory technique MSC can be adapted in many ways. Validity is provided through a process of transparency and verification, described in the User Guide.

The use of qualitative 'Significant Change' questions from MSC offers a rich complement to the quantitative indicators. The questions provide a relatively unfiltered voice to both participants and front line staff, and enable them to communicate the issues that are important to them even if they are not captured by closed-ended questions.

The MSC questions can be adapted to the vocabulary of the participants (e.g., 'Thinking about the whole program, what was the most important change for you?'). The responses are sent to staff at least once a month to act as an ongoing opportunity to respond to concerns of participants. It also enables organizations to check on the logic model of the program as seen by participants – what is actually important to them? – and provides stories for stakeholders and funders. The analysis requires some time. Most importantly, personal details must be disguised to protect client confidentiality, and participants must be asked permission to share their stories. If results are to be reported quantitatively, someone must code and categorize the responses. But in most cases, agencies do not need to code responses – they just need to read them, mine from them and learn.

There are two steps to the MSC technique. First, each participant is asked to describe the most significant change they experienced as a result of the program. Next, staff are asked to select the most significant story and pass it up to the next level of the organization. The agency ends up with a set of powerful vignettes to share with funders and stakeholders. Agencies should read the instruction guide if they wish to use the entire approach (Davies & Dart, 2005).

The list of indicators

The following section lists survey questions and data elements that have met our criteria for indicator selection so far. The indicators are grouped by the instrument they have been taken from, and they are also available in an accompanying spreadsheet that can be sorted by several characteristics:

- The type of data, e.g., surveys of participants, surveys of service providers, and financial data filled out by staff.
- The type of outcome, i.e., impact, behaviour, and KASA (knowledge/attitudes/skills/aspirations) as described in the preliminary logic model above.
- The outcome category: Consumer credit, major loans, savings, money management, progress on financial goals, financial capability and health/wellness. These categories are not based on a formal conceptual framework; they are intended to provide an easy-to-understand way for organizations to search for relevant questions. Prosper Canada should feel free to use other categorizations for its online tools based on user testing.

Note that a single question or data element may be included multiple times, as a stand-alone indicator, and as an element in one or more composite scores. Each indicator will have an Indicator Reference Sheet with a rationale for its use (see sample Indicator Reference Sheets below).

As stated earlier, the indicator list is incomplete. It does not cover demographics, organizational practices, program quality and so on. In addition, it is repetitious. Many of the questions are very similar, and address the same issues with slightly different wording. The online tool will provide guidance on the most appropriate instruments, and will help organizations to select between groups of similar indicators based on their needs.

*The indicators are from the following instruments (listed alphabetically):

1	Australian Financial Attitudes and Behaviour Tracker, Australian Securities and Investments Commission
2	Canadian Community Health Survey, Statistics Canada
3	CFPB Financial Well-Being Scale
4	Financial Capability Scale, University of Wisconsin-Madison
5	Financial Health Metrics, Consumer Financial Services Innovation (CFSI)
6	Financial Literacy Evaluation Resource Kit, Prosper Canada
7	Most Significant Change Technique, Davies and Dart 2005
8	Personal Financial Literacy Self-Assessment Quiz, FCAC

#	Question or data element	Possible answers	Type of indicator	Outcome category	*
Australian Financial Attitudes and Behaviour Tracker, Australian Securities and Investments Commission					1
1	An investment with a high rate of return is more likely to have…	(PLEASE SELECT ONE RESPONSE ONLY) A higher level of risk A lower level of risk The same level of risk as other investments Unsure	Survey – Participant	Money management	1
2	Do you have a 15-20 year financial plan?	(PLEASE SELECT ONE RESPONSE ONLY) By financial plan we mean a series of actions to achieve a financial goal or goals; these may be written or not. Yes No	Survey – Participant	Money management	1
3	Do you have a 3-5 year financial plan?	(PLEASE SELECT ONE RESPONSE ONLY) By financial plan we mean a series of actions to achieve a financial goal or goals; these may be written or not. Yes No	Survey – Participant	Money management	1
4	If Yes [to "Do you have a 3-5 year financial plan?"], Which of the following have you done on your 3-5 year financial plan within the last 6 months?	(PLEASE SELECT ALL THAT APPLY) Monitored my progress Reached some of the financial goals I set Adjusted my financial plan Have not done anything None of these	Survey – Participant	Money management	1
5	If Yes [to “Do you have a 15-20 year financial plan?”], Which of the following have you done on your 15-20 year financial plan within the last 6 months?	(PLEASE SELECT ALL THAT APPLY) Monitored my progress Reached some of the financial goals I set Adjusted my financial plan Have not done anything None of these	Survey – Participant	Money management	1

6	Listed below are a number of statements various people have used to describe their financial situation. Could you please tell us how strongly you agree or disagree with each statement regarding your own financial situation?	(1) Strongly Agree (2) Agree (3) Neither Agree nor Disagree (4) Disagree (5) Strongly Disagree Dealing with money is stressful and overwhelming (1, 2, 3, 4, 5) Financially, I like to live for today and not think too much about tomorrow (1, 2, 3, 4, 5) Dealing with money is interesting(1, 2, 3, 4, 5) I have difficulty understanding financial matters (1, 2, 3, 4, 5) I spend a lot of time thinking about financial information before I make a decision (1, 2, 3, 4, 5) Nothing I do will make much difference to my financial situation (1, 2, 3, 4, 5) I try to stay informed about money matters and finance (1, 2, 3, 4, 5) I am too busy to sort out my finances at the moment (1, 2, 3, 4, 5) I often buy things on impulse (1, 2, 3, 4, 5) My family and friends often come to me for advice about financial decisions (1, 2, 3, 4, 5) I am confident when it comes to managing my money (1, 2, 3, 4, 5)	Survey – Participant	Goals progress	1

7	Now thinking about savings, which of the following have you done over the last 6 months?	(PLEASE SLECT ALL THAT APPLY) Saved money using a savings account that is not automatically linked to my pay (i.e. manually place money into this account when I have extra cash) Saved money using a savings account that is automatically linked to my pay (i.e. money is automatically placed into this account when I get paid) Saved money but not through a savings account (e.g. I put money in an envelope or money box and did not touch it) I saved money without having a savings plan in place (i.e. I earned more money than what I spent) Saved money by making voluntary contributions to my superannuation Saved money by paying more than the minimum amount off my mortgage or other personal loan Other, please specify I did not save any money over the last 6 months	Survey – Participant	Savings	1
8	Thinking about your main Car loan over the last 6 months have you…	(PLEASE SELECT ALL THAT APPLY) Missed one or more minimum payments due Paid the minimum amount due each month Paid some money in addition to the minimum amount due, but not the full amount Paid the loan off in full None of the above I'd prefer not to say	Survey – Participant	Consumer credit	1

9	Thinking about your main Credit Card(s) over the last 6 months have you…	(PLEASE SELECT ONE RESPONSE ONLY) Missed one or more minimum payments due Paid the minimum amount due each month Paid some money in addition to the minimum amount due, but not the full amount Paid the amount due in full each month None of the above I'd prefer not to say	Survey – Participant	Consumer credit	1
10	Thinking about your main Home loan(s) - not includint investment property loans, over the last 6 months have you…	(PLEASE SELECT ALL THAT APPLY) Missed one or more minimum payments due Paid the minimum amount due each month Paid some money in addition to the minimum amount due, but not the full amount Paid the loan off in full None of the above I'd prefer not to say	Survey – Participant	Major loans	1
11	Thinking about your main Personal loan(s) - other than home loans or car loans, over the last 6 months have you…	(PLEASE SELECT ALL THAT APPLY) Missed one or more minimum payments due Paid the minimum amount due each month Paid some money in addition to the minimum amount due, but not the full amount Paid the amount due in full each month None of the above I'd prefer not to say	Survey – Participant	Consumer credit	1
12	Which of the following best describes your approach to your personal finances over the last 6 months?	(PLEASE SELECT ONE RESPONSE ONLY) I had a budget and always stuck to it I had a budget and mostly stuck to it I had a budget but did not stick to it I did not have a budget during this period	Survey – Participant	Money management	1

13	Which of the following methods have you used in the last 6 months to keep track of your money?	(PLEASE SELECT ALL THAT APPLY) I kept track of my money in my head I kept track of my money by writing down notes I kept receipts I used a household budget/spread sheet I used an online budgeting tool or app I used an app to keep track of my spending I checked my bank statements for unusual/suspicious entries I checked my credit card statements for unusual/suspicious entries I looked at some or all of my bank/credit card statements but not in any detail Other (Please specify…) None of the above (I didn't keep track of my spending) I'd prefer not to say	Survey – Participant	Money management	1
14	Which of the following statements best describes how you would manage if you suffered a sudden loss of income and had to cover three months' living expenses?	(PLEASE SELECT ALL THAT APPLY) I would access money through my own savings and investments I would sell something I would access credit from a financial institution I would use some form of income replacement insurance I would get a loan from friends and family I would get a gift from friends / family I would access the money in some other way (please specify…) I would not be able to cover three months living expenses I don't know how I would manage but I would find a way	Survey – Participant	Money management	1

15	Which of the following statements best describes your current financial situation?	(PLEASE SELECT ONE RESPONSE ONLY) I never seem to have enough money to cover my expenses I manage to meet all my expenses but there's nothing left over to save I meet my expenses and have a little bit left over to spend or save I comfortably meet my expenses and can easily save or spend if I want to.	Survey – Participant	Goals progress	1
16	Which of the following statements best describes your understanding of these investing principles?	(PLEASE SELECT ONE OPTION PER ROW) (1) I haven't heard of this (2) I have heard of this but don't really understand it (3) I have heard of this and understand it Risk/return trade off (1, 2, 3) Diversification (1, 2, 3)	Survey – Participant	Money management	1

Canadian Community Health Survey					2
17	(How satisfied are you) with your financial situation?	Very satisfied Satisfied Neither satisfied nor dissatisfied Dissatisfied Very dissatisfied Refuse to answer Don't know	Survey – Participant	Goals progress	2
18	In the past month, how often did you feel good at managing the responsibilities of your daily life?	Every day Almost every day About 2 or 3 times a week About once a week Once or twice Never Refuse to answer Don't know	Survey – Participant	Health and wellness	2

CFPB Financial well-being scale					3
89	I could handle a major unexpected expense	Completely Very well Somewhat Very little Not at all	Survey – Participant	Money management	3
90	I am securing my financial future	Completely Very well Somewhat Very little Not at all	Survey – Participant	Goals progress	3
91	Because of my money situation, I feel like I will never have the things I want in life	Completely Very well Somewhat Very little Not at all	Survey – Participant	Money management	3
92	I can enjoy life because of the way I’m managing my money	Completely Very well Somewhat Very little Not at all	Survey – Participant	Money management	3

93	I am just getting by financially	Completely Very well Somewhat Very little Not at all	Survey – Participant	Financial capability	3
94	I am concerned that the money I have or will save won't last	Completely Very well Somewhat Very little Not at all	Survey – Participant	Savings	3
95	Giving a gift for a wedding, birthday or other occasion would put a strain on my finances for the month	Always Often Sometimes Rarely Never	Survey – Participant	Money management	3
96	I have money left over at the end of the month	Always Often Sometimes Rarely Never	Survey – Participant	Savings	3
97	I am behind with my finances	Always Often Sometimes Rarely Never	Survey – Participant	Money management	3
98	My finances control my life	Always Often Sometimes Rarely Never	Survey – Participant	Money management	3

Financial Capability Scale					4
19	(Composite- 1 to 3 Point Scale) 1. Over the last 3 months, have you followed a personal budget, spending plan, or financial plan? • Yes • No 2. How confident are you in your ability to achieve a financial goal you set for yourself today? • Not at all confident • Somewhat confident • Very confident 3. If you had an unexpected expense or someone in your family lost a job, got sick or had another emergency, how confident are you that your family could come up with money to make ends meet within a month? • Not at all confident • Somewhat confident • Very confident 4. Do you currently have an automatic deposit or electronic transfer set up to put money away for a future use such as saving for retirement or education? • Yes • No 5. In the last 3 months, did you use an automatic deposit or transfer to put money away for a future use such as saving for retirement or education? • Yes • No 6. In the last 3 months, have you paid a late fee on a loan or bill? • Yes • No		Survey – Participant	Financial capability	4

20	Do you currently have an automatic deposit or electronic transfer set up to put money away for a future use such as saving for retirement or education?	Yes No	Survey – Participant	Savings	4
21	Do you currently have at least one financial goal?	Yes No	Survey – Participant	Goals progress	4
22	How confident are you in your ability to achieve a financial goal you set for yourself today?	Not at all confident Somewhat confident Very confident	Survey – Participant	Goals progress	4
23	How would you rate your current credit record?	Very bad Bad About average Good Very good Don't know	Survey – Participant	Consumer credit	4
24	If you had an unexpected expense or someone in your family lost a job, got sick or had another emergency, how confident are you that your family could come up with money to make ends meet within a month?	Not at all confident Somewhat confident Very confident	Survey – Participant	Money management	4
25	In the last 3 months, have you paid a late fee on a loan or bill?	Yes No	Survey – Participant	Major loans	4
26	Over the last 3 months, have you followed a personal budget, spending plan, or financial plan?	Yes No Don't know	Survey – Participant	Money management	4
27	Over the past 3 months, would you say your household's spending on living expenses was less than its total income? "Don't know" is an important indicator on its own and should be separated before using the scale.	Yes No Don't know	Survey – Participant	Money management	4

Financial Health Metrics					5
28	Active use of a plan or budget (such as online budget, another online tool, financial coach, etc.)	Yes n/a No	Survey – Participant	Money management	5
29	Amount of bill payments (including debt) in relation to amount due	Pay full amount Pay minimum Pay less than minimum	Financial data	Money management	5
30	Amount of debt payments in relation to amount due	Pay full amount Pay partial amount, pay minimum Pay less than minimum	Financial data	Consumer credit	5
31	Are you or others in your household covered by any type of public or private health insurance?	Yes, everyone is covered Yes, but not everyone is covered No, nobody is covered	Survey – Participant	Money management	5
32	Automatic deposit or electronic transfer has been set up to put money away for future use	Setup No setup n/a	Financial data	Savings	5
33	Cash flow analysis of an individual's total monthly income compared to their total monthly expenses	Expenses < Income Expenses = Income Expenses > Income	Financial data	Money management	5
34	Credit score or credit quality tier	Super prime Prime Nonprime Subprime Deep subprime	Financial data	Consumer credit	5
35	Debt Service Ratio	Less than 10% = manageable 10 and 40% = high, but still manageable 40% = unhealthy	Financial data	Consumer credit	5
36	Do you have a plan to achieve your longer-term financial goals?	Yes n/a No	Survey – Participant	Goals progress	5

37	Does main earner(s) with dependents in your household have life insurance?	Yes N/a No	Survey – Participant	Money management	5
38	Does your household have a budget, spending plan, or financial plan that you use to guide how your money gets spent each month?	Yes or We do not need a budget because we always have enough money n/a No	Survey – Participant	Money management	5
39	Does your household plan ahead to make sure you have the money to pay for large, irregular expenses (for example, bills not due each month, such as insurance, property taxes, car registration, etc.)?	Yes or We do not need to plan ahead because we always have enough money n/a No or We would if we could	Survey – Participant	Money management	5
40	Financial Obligations Ratio	Under 15% = good 15-20% = caution zone Over 20% = no more debt	Financial data	Consumer credit	5
41	Frequency of customer financial engagement (such as, logging into account, checking balances, reviewing transaction history, calling customer service, visiting a branch, checking credit score/report)	Balanced level of engagement Excessive level of engagement or rare level of engagement Unengaged	Financial data	Money management	5
42	How confident are you in your ability to reach your household's financial goals?	Very confident Somewhat confident Not at all confident	Survey – Participant	Goals progress	5
43	How much does your household have in non-retirement savings?	6 or more months of living expenses 3-5 months of living expenses Less than 3 months of living expenses	Survey – Participant	Savings	5
44	How much stress do your finances cause you?	No stress or A small degree of stress A moderate degree of stress Significant stress	Survey – Participant	Health and wellness	5

45	How often does your household have to juggle which bills get paid when?	Never Sometimes, seldom Always, most of the time	Survey – Participant	Money management	5
46	How satisfied are you with your present financial condition?	Very satisfied Satisfied Neither satisfied nor unsatisfied Unsatisfied Very unsatisfied	Survey – Participant	Goals progress	5
47	How would you describe how much debt your household has right now?	About the right amount of debt Somewhat too much debt An excessive amount of debt	Survey – Participant	Consumer credit	5
48	How would you rate your credit score?	Excellent Good Fair Poor Very Poor	Survey – Participant	Consumer credit	5
49	How would you rate your household's financial situation today?	Excellent or Good Fair Poor	Survey – Participant	Goals progress	5
50	Identified/named savings goal(s) on accounts (i.e. college fund, vacation fund, investment fund)	Yes n/a No	Financial data	Savings	5
51	In a typical month, how difficult is it for your household to cover your expenses and pay all your bills?	Not at all difficult Somewhat difficult Very difficult	Survey – Participant	Money management	5
52	In the past 12 months, how would you describe your household's spending patterns?	Spending much less or a bit less than income Spending about equal to income Spending a bit more or much more than income	Survey – Participant	Money management	5
53	Non-retirement account balances are increasing (i.e. checking accounts, savings accounts, prepaid card balances, etc.)	Increasing Staying the same Decreasing	Financial data	Savings	5

54	Number of months of living expenses available in household accounts	More than 3 months 1-3 months Less than 1 month	Survey – Participant	Money management	5
55	Number of months of living expenses available in household accounts	More than 3 months 1-3 months Less than 1 month	Financial data	Money management	5
56	Percentage of income that gets deposited into savings accounts	Number	Financial data	Savings	5
57	Retirement account balances are increasing	Increasing Staying the same Decreasing	Financial data	Savings	5
58	Thinking about the past 12 months, which of the following describes your household's experience with credit cards?	Pay credit cards in full Generally make more than the minimum payment, but carry over a balance and pay interest Generally make the minimum payment only, but carry over a balance and pay interest	Survey – Participant	Consumer credit	5
59	Thinking about your household's finances today, how financially prepared do you feel your household is for the unexpected?	Very prepared Somewhat prepared or Only a little prepared Not at all prepared	Survey – Participant	Money management	5
60	Timing of bill payments (including debt) in relation to payment due dates	On due date or before Soon after due date (within 10 days) Well after due date (after 10 days)	Financial data	Money management	5
61	Timing of debt payments in relation to due date	On due date or before Soon after due date (within 10 days) Well after due date (after 10 days)	Financial data	Consumer credit	5
62	To what extent do you have the skills and knowledge to manage your household's finances well?	I am well equipped with the skills and knowledge I need I am somewhat equipped with the skills and knowledge I need I am not equipped with the skills and knowledge I need	Survey – Participant	Money management	5

63	Type and extent of life and health insurance coverage in the household	Every adult in the household has life (for main earner) and health insurance At least 1 adult in the household has life OR health insurance No adult in the household has either life or health insurance.	Financial data	Money management	5
64	When making a large financial decision, do you know where to go for advice or information?	Yes Sometimes No	Survey – Participant	Money management	5
65	When you think about saving money for the future, which of these timeframes is most important to you?	Next 5 years or longer Next year or few years Next few weeks or months	Survey – Participant	Savings	5
66	Which one of the following statements best describes how well your household is keeping up with your bills and credit commitments at the moment?	Keeping up with all bills and payments without any difficulties Keeping up with all bills and payments, but it is a struggle from time to time Keeping up with all bills and payments, but it is a constant struggle Falling behind with some bills or credit payments Falling behind with many bills or credit payments	Survey – Participant	Money management	5
67	Which one of the following statements comes closest to describing your household's saving habits?	Save regularly by putting money aside each month Have automatic deposit or electronic transfer set up to put money away for future use (such as savings) Save income of one family member, spend the other Spend regular income, save other income Save whatever is left over at the end of the month - no regular plan Don't save - usually spend more than income Don't save - usually spend about as much as income	Survey – Participant	Savings	5

Financial Literacy Evaluation Resource Kit					6
68	(Composite- 0 to 3 Point Scale) Tell us how you feel about managing your money… I feel confident managing my money I worry about how much debt I have I feel comfortable getting help with my money (examples: finding resources online, seeing a credit counsellor, help with my taxes or talking to someone at the bank) I worry about being able to pay my bills each month I feel that I will improve my financial situation Please circle the number that best explains how often you do the following: • Never • Rarely • Sometimes • Usually • Always Note: An answer should be provided to each of the statements. The question could be structured in a matrix form.		Survey – Participant	Money management	6

69	(Composite- 0 to 3 Point Scale) What do you currently do to manage your money? Pay my bills on time Make sure that my spending isn't more than my income each month Keep track of my spending and income Save money Compare prices when shopping Pay my debt when I owe money Learn about money topics that might affect me Get help with my money (examples: filing taxes, financial advisor, credit help, credit counseling or using online tools and resources)	Please circle the number that best explains how often you do the following: Never Rarely Sometimes Usually Always Note: An answer should be provided to each of the statements. The question could be structured in a matrix form.	Survey – Participant	Financial capability	6
70	Did you file your income tax forms last year?	Yes No I don't know	Survey – Participant	Money management	6
71	Do you budget your money? Please check one:	Yes No	Survey – Participant	Money management	6
72	Do you have a goal for saving money?	Yes No	Survey – Participant	Savings	6
73	Do you have a long-term plan for your money (e.g. for retirement)?	Yes No	Survey – Participant	Money management	6
74	Do you have any savings set aside?	Yes No	Survey – Participant	Savings	6

75	Have you checked your credit history or credit rating in the past 12 months?	Yes No I don’t know	Survey – Participant	Consumer credit	6
76	If yes [to “Do you budget your money?”], how do you budget your money?	I write out a budget I keep a budget in my head Other	Survey – Participant	Money management	6
77	If yes [to “Do you budget your money?”], how often do you follow your budget?	I follow my budget Please circle the number that best explains how often you do the following: Never Rarely Sometimes Usually Always	Survey – Participant	Money management	6
78	If yes [to “Do you have any savings set aside”], did you save and put aside any of your money in the past month?	Please check one: Yes No	Survey – Participant	Savings	6
79	Over the last year, have you been late by 2 months or more on a bill or other payment? (examples: cell phone, rent or utilities)	Yes No I don’t know	Survey – Participant	Major loans	6
80	What financial services do you currently use?	Please check all the services that you use: Bank Credit union or caisse populaire Cheque cashing and payday loan services (e.g. Money Mart) I don't use any financial services Other	Survey – Participant	Money management	6

Most Significant Change Technique					7
81	From among all these significant changes, what do you think was the most significant change of all? [NOTE: Agencies may revise the wording]	Open text in response to list of Most Significant Changes submitted by participants	Survey – Participant	Goals progress	7
82	Looking over the whole program, what do you think was the most significant change for you? [NOTE: Agencies may revise the wording]	Open text	Survey – Participant	Goals progress	7

Personal Financial Literacy Self-Assessment Quiz					8
83	(Composite) How would you rate yourself on keeping track of money? How would you rate yourself on making ends meet? How would you rate yourself on shopping around to get the best financial products? How would you rate yourself on staying informed on financial issues?	Very good Good Fairly good Not very good Don't know	Survey – Participant	Financial capability	8
84	How would you rate yourself in staying informed on financial issues?	Very good Good Fairly good Not very good Don't know	Survey – Participant	Money management	8
85	How would you rate yourself on keeping track of money?	Very good Good Fairly good Not very good Don't know	Survey – Participant	Money management	8
86	How would you rate yourself on making ends meet?	Very good Good Fairly good Not very good Don't know	Survey – Participant	Money management	8
87	How would you rate yourself on shopping around to get the best financial products?	Very good Good Fairly good Not very good Don't know	Survey – Participant	Money management	8
88	I have a clear idea of the financial products that I need	Agree Disagree Don't Know	Survey – Participant	Money management	8

Rejected Indicators

We rejected many indicators that were included in our selected instruments because they did not meet the criteria. Below is a sampling of a few indicators we did not include along with a brief rationale. Note that most of them were not designed for the purposes of evaluating financial education program outcomes.

	QUESTION OR DATA ELEMENT	ANSWER OPTIONS	RATIONALE FOR NON-INCLUSION
1	In the past 12 months, did [you or other adults in your household] ever cut the size of your meals or skip meals because there wasn't enough money for food?	Yes No RF DK	Asks for the last 12 months, which makes it unfeasible for most pre-post designs. However, agencies could change the time period. The Canadian Community Health Survey (CFHS) has several food security questions that could be adapted. This question is especially relevant for people living on very low incomes.
2	Thinking about stress in your day-to-day life, what would you say is the most important thing contributing to feelings of stress you may have?	Work Financial concerns Family School work Time pressures / not enough time Health Other - Specify None RF, DK	There is some evidence that the effects of stress are more harmful when stress is part of a negative narrative (Keller et al., 2012). The act of asking this question as an outcome indicator raises the risk that the survey itself may have negative effects on participants. Question is from Canadian Community Health Survey.
3	Over the last two weeks, how often have you felt down, depressed, or hopeless?	Not at all Several days More than half the days Nearly every day RF DK	This question addresses some program theories for financial wellness and is well constructed. It may be useful as a profile of participants and their mental health. However, it is not action-focused in relation to financial education programs, it raises confidentiality risks, and it is not clearly related to financial outcomes. It is possible that participants typically go through a period of hopelessness as they progress through a financial education program, and that might be a good sign. (Self-esteem has the same problem as an indicator (Baumeister, Campbell, Krueger, & Vohs, 2003)). Question is from Canadian Community Health Survey.
4	In the last 12 months, were you ever behind two or more consecutive months in paying your rent or mortgage?	Yes No Don’t know	There are two problems with this question: ‘consecutive questions’ may be overly complex language, as pointed out in a submission to Statistics Canada by Prosper Canada (Prosper Canada, 2012a). More important, the 12 month time period makes the question unsuitable for a pre-post survey. Question is from FCAC Personal Financial Literacy Self-Assessment Quiz
5	If other [to “how do you budget your money?”], please tell us.	(Text response)	We have generally rejected qualitative questions as outcome indicators unless they can be easily analyzed (e.g, just counting the number of text characters) or can be used

	QUESTION OR DATA ELEMENT	ANSWER OPTIONS	RATIONALE FOR NON-INCLUSION
			to improve the program (e.g., the Most Significant Change questions). In our opinion, the value of coding, analyzing and reporting the text responses to 'If Other, please tell us' is not worth the effort. Question is from Financial Literacy Evaluation Resource Kit, Prosper Canada.
6	Which of the following statements best describes the way in which you decide how much money to put aside as savings?	I have a set amount that I always put aside. I put aside what is left over after expenses. I determine how much I put aside in another way.	This is one of the hundreds of questions that NeighborWorks has included in its instruments. Many of them are great. However, most are not outcome indicators are such, and the ones that address outcomes are similar to questions from other instruments. Most of the questions do not appear to be actionable in terms of leading to program improvements. This question is from NeighborWorks Success Measures (NeighborWorks America, n.d.)
7	Do you have a mortgage?	Yes No	It's not clear how this is an actionable outcome. Question is from Financial Literacy Evaluation Resource Kit, Prosper Canada.
8	Education: Please check the one that shows the highest level you have finished	Elementary school (not completed) High school (not completed) High school diploma CEGEP diploma (Quebec) College (not completed) College diploma University (not completed) University degree	This question represents a host of demographic characteristics – ethnicity, language, citizenship, household composition and income, etc. We have recommended only two basic demographic dissaggregations for the outcome indicators: age and sex. Other demographic characteristics, like educational level, are primarily useful as questions of 'Reach' – did the agency serve the targeted population? – rather than outcomes. It requires a lot of effort to analyze outcomes by demographic characteristics, and the statistical power and data quality are unlikely to make it worth it. However, experienced evaluators may use these characteristics to dig into outcomes, as long as they understand the statistical limitations. Question is from Financial Literacy Evaluation Resource Kit, Prosper Canada.

Sample Indicator Reference Sheets

Below are several samples of Indicator Reference Sheets that have been developed for each indicator in the list above. Every indicator, including standalone questions within an instrument, has its own Indicator Reference Sheet. They are all available in an accompanying spreadsheet from Prosper Canada; some are in draft format and all of them require review and ratification by experts in the next phase of consultation.

This approach to documenting indicators was adapted from several sources (including indicatorregistry.org, GAVI Vaccine Alliance and PEPFAR's "Monitoring, Evaluation, and Reporting Indicator Reference Guide") and is designed to provide all the details required to understand all aspects of the indicator, its validity and how to use it in an evaluation of a financial literacy program.

Many Indicator Reference Sheets offer multiple options for measurement calculation and reporting. In actual use, most agencies would select only one option for measurement and reporting. They may well select additional options for demographic breakdowns besides our recommended ‘age and sex’, and may collect data at multiple points throughout the evaluation process. Any of these variations are fine as long as the agency communicates their decisions if the data will be aggregated with other programs. Otherwise the data will not be comparable.

Change in self-perceived ability to keep track of money

Change in self-perceived ability to keep track of money

Outcome category:	**Money management**
Outcome type:	**Could be used in any of Impact, Behaviour, Knowledge-Attitudes-Skills-Aspirations depending on program logic model.**

How to use this document:

Indicator Reference Sheets define indicators in enough detail that they can be used to share comparable data across organizations. Users should select indicators that best fit their organization’s needs, then select the most useful options for method of measurement, frequency and demographic breakdowns (e.g., age and sex). Options are rated 1 (Highly Recommended), 2 (Recommended) and 3 (Optional). For information about how to use, create or revise Indicator Reference Sheets, see [DOI reference].

Indicator Code: **FIN-Mgmt-167**

Description:

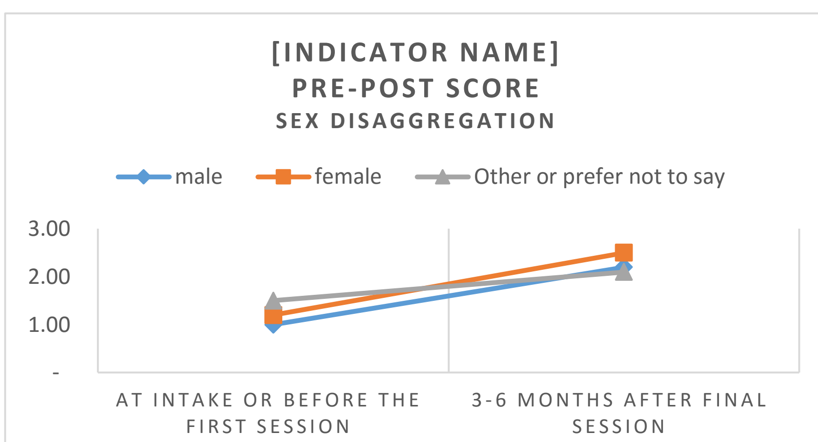
The indicator is a survey question intended to measure the change in a person’s control over day-to-day and/or month-to-month finances before and after a program intervention. The indicator could also be used to measure changes in the beliefs that an individual has regarding their management over money (i.e., financial self-efficacy), or their skills in money management. Note that it is not an objective measurement of financial control – it asks the participant about their own perceptions.

Rationale:

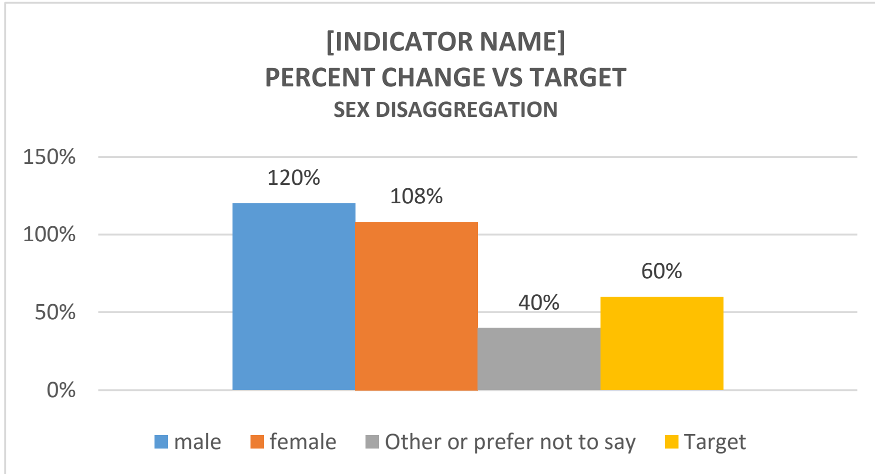
The FCAC's "Financial literacy self-assessment quiz" is a 30-item questionnaire that assesses an individual's financial literacy skills and knowledge. The questions were taken from the Canadian Financial Capability Scale, a national survey carried out by Statistics Canada (Statistics Canada, 2014). Many of the questions from the FCAC quiz are also included in a 'Personal Financial Literacy Quiz' developed by Prosper Canada and included in their Financial Literacy Evaluation Resource Kit (see above).
The Canadian Financial Capability Survey (CFCS) 2014 sheds light on Canadians' knowledge, abilities and behaviour concerning financial decision-making - in other words, how Canadians understand their financial situation, the financial services available to them and their plans for the future. The survey is designed to collect information surrounding respondents' approaches to day-to-day money management and budgeting, longer term money management and general financial planning. The CFCS was designed to be collected by telephone interview, an approach that reflected previous successes in other countries with similar subject matter. A first round of cognitive testing, including one-on-one interviews and focus group discussions, across Canada in spring 2007 confirmed that this was indeed the best way to proceed. With the addition of Finance Canada and the Bank of Canada as active partners, the content was modified to reflect each of the partners' data needs. This led to a second round of cognitive testing in only a few selected cities in the spring of 2008. The computer-assisted telephone interviewing (CATI) application was developed and tested during the summer and fall months in 2008. In an attempt to maintain comparability, the 2014 Canadian Financial Capability Survey has kept the 2009 CFCS's content intact, making only very slight updates where necessary. The 2014 application was then re-developed and tested in the early months of 2014 (Arrowsmith & Pignal, 2007), (Arrowsmith, Pignal, & Kleim, 2006).
6 questions out of a total of 29 were selected from the Financial Literacy Self-Assessment Quiz.

Data element:	How would you rate yourself on keeping track of money? • Very good • Good • Fairly good • Not very good • Don't know
Method of Measurement:	A method of measurement has been developed to enable numerical indication of the change in the data element and to provide representation of the contribution of each answer option to the overall score. This measurement approach is a combination of two separate methods: I. Calculating percent change in the pre and post indicator score; and II. Calculating the relative share of each answer option. These two methods, presented in a combination, display a clear indication of a change that has occurred and provide representation of the underlying data. A detailed description of how to calculate and present the results is provided below. The terms 'program' and 'intervention' will be used interchangeably.

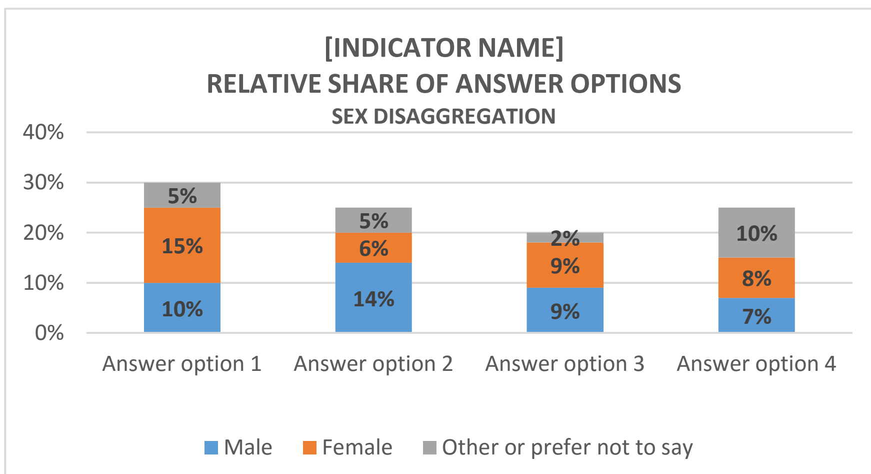
	1	I. Calculating the percent change between the pre and post indicator score When utilizing the above data element, participants would be asked to answer the question at the beginning of the program (pre-survey) and also near the conclusion of the program (post-survey). Calculating the change in responses will provide information about the indicator of how participants have learned to be more fiscally responsible. This option of assessing results displays a clear and intuitive representation of change that has occurred. Percent increase/decrease in the pre-post indicator score is also a good standardized measure that allows comparison between financial empowerment program elements. Ideally, the program could set a numerical standard (target) to measure actual change against desired change. The change in difference is represented by a percentage number, which shows the difference between the post intervention score and the pre intervention score following the formula: ((post intervention score)-(pre intervention score)/(pre intervention score))*100. The numerator is the difference between the post intervention score and the pre intervention score. The denominator is the pre intervention score. The numerator is divided by the denominator and then multiplied by a factor of 100 to present a percentage value. Calculation of pre and post intervention scores Pre intervention and post intervention scores are calculated identically, with the difference that pre intervention numerator and denominator are calculated using the number of responses recorded before the intervention and the post intervention numerator and denominator are calculated using the number of responses recorded after the intervention. The pre intervention and post intervention scores are arithmetic means, derived by dividing a pre/post numerator to pre/post denominator. The pre/post numerator is a composite of the following two data components: 1. Number of responses to each answer option 2. The score attributed to each answer option The pre/post numerator is calculated by multiplying the total number of responses of each answer option by the respective score and adding the results. The values attributed to each answer options are as follows: • Very good = 3 • Good = 2 • Fairly good = 1 • Not very good = 0 • I don't know = 0 To calculate the nominator, use the following formula ((number of responses to “Very good” x 3) + (number of responses to “Good” x 2) + (number of responses to “Fairly good” x 1) + (number of responses to “Not very good” x 0) + (number of responses to “I don’t know” x 0))

		The denominator is the sum of the responses to each answer option (the total responses to the indicator question). To calculate the denominator, use the following formula ((number of responses to “Very good”) + (number of responses to “Good”) + (number of responses to “Fairly good”) + (number of responses to “Not very good”) + (number of responses to “I don’t know”)). The pre and post intervention score method described above is used to calculate the aggregate average data element score of all program participants. The individual (personal) score is simply the point assigned to the provided answer option. II. Calculating the relative share of each answer option (Recommended approach) This method is used to calculate the relative share of each answer option, expressed in percentages. The relative share of each answer option is calculated separately. The numerator is the number of responses to the respective answer option and the denominator is the total number of responses to the question. The numerator is divided by the denominator and then multiplied by a numerical factor of 100 to create a percentage value. For accurate representation of the data the sum of the relative shares of each answer option must equal a 100% figure. These calculations are performed in the beginning of the program, using the data then obtained and at the end of the program with the updated answer options. The results are compared and the changes are analyzed. Reporting type: The results of the measurement could be summarized in a table or chart format. Three chart templates are provided below. Presented altogether, the charts provide comprehensive information of the program score, the change that has occurred, as well as additional information of the underlying data. 

The chart illustrates the indicator score before or during the program and the indicator score after the program completion, disaggregated by sex.



The chart illustrates the percent change in the indicator score before and after the program, disaggregated by sex. A targeted percent change could be added and measured against.



The chart illustrates the relative share of each answer option of the data element, disaggregated by sex.

IMPORTANT NOTES:

1. Make sure that post intervention results are accompanied by the program dropout rate and that the responses to the pre intervention survey of the people who dropped out are analyzed to determine their impact on post survey results (indicator is in development).

2. When targeted changes in indicator scores are set make sure that the pre intervention score is compared to the maximum possible indicator score to examine the boundaries. This will enable the appropriate target determination

		and correct interpretation of results. For example, assuming the pre-program indicator score is 0.8 points out of a maximum of 2.0 points the maximum improvement possible is 1.2 points, which is a 150%. When analyzing the results, users should mind the maximum possible change, rather than the intuitive change of 100%. 3. The methods of measurement and the respective chart templates, suggested for reporting might not be comprehensive in presenting and explaining program results. A further calculation, analysis, description and data presentation might be necessary to interpret the results. For example, when examining why female positive change is lower than male positive change, the reason could be that either female had considerably higher score in the beginning of the program (not much room for improvement) or the program did not have such a positive impact on women as it had on men. Further analysis of the pre-post scores is need to reach to a conclusion.
	2	
	3	
Data Collection Frequency:	**1**	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 3-6 months after final session
	2	Pre-Post Intervention Data Collection Pre: At intake or before the first session Post: at final session or within two months of final session
	3	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 7 months or more after completion of a financial empowerment program
Data Source:	The survey question is answered by the program participants with or without assistance. The answers to the question may be read aloud or included in a written survey.	
Numerator:	**1**	I. Calculating change by using a differential percentage from the pre and post indicator score The numerator is a numerical representation of the difference between the post intervention score and the pre intervention score. A detailed description of how to calculate the pre intervention and post intervention scores is provided in the “Method of Measurement” section in this document.

		II. Calculating the relative share of each answer option Each answer option in the data element is individually calculated and expressed in percentage values. The numerator is the total number of responses the respective answer option received.
	2	
	3	
Denominator:	**1**	I. Calculating change by using a differential percentage from the pre and post indicator score The denominator is the pre intervention score. A detailed description of how to calculate the pre intervention score is provided in the "Method of Measurement" section in this document. II. Calculating the relative share of each answer option The denominator is the total number of responses to the indicator question.
	2	
	3	
Disaggregation(s):	**1**	Age (17 and younger; 18-24; 25-29; 30-39; 40-54; 55-64; 65-74; 75 and over; Prefer not to say) Sex (Male; Female; Other or prefer not to say) Age/Sex disaggregates: 17 and younger male, 17 and younger female, 17 and younger other; 18-24 male, 18-24 female, 18-24 other; 25-29 male, 25-29 female, 25-29 other; 30-39 male, 30-39 female, 30-39 other; 40-54 male, 40-54 female, 40-54 other; 55-64 male, 55-64 female, 55-64 other; 65-74 male, 65-74 female, 65-74 other; 75 and over male, 75 and over female, 75 and over other; Prefer not to say male, Prefer not to say female, prefer not to say other
	2	Age (19 and younger; 20-29; 30-39; 40-49; 50-59; 60-69; 70 and over; Prefer not to say) Sex (Male; Female; Prefer not to say) Age/Sex disaggregates: 19 and younger male, 19 and younger female; 19 and younger prefer not to say; 20-29 male, 20-29 female, 20-29 prefer not to say; 30-39 male, 30-39 female, 30-39 prefer not to say; 40-49 male, 40-49 female, 40-49 prefer not to say; 50-59 male, 50-59 female, 50-59 prefer not to say; 60-69 male, 60-69 female, 60-69 prefer not to say; 70 and over male, 70 and over female, 70 and over prefer not to say; Prefer not to say male, prefer not to say female, prefer not to say for age - prefer not to say for sex

References:	Financial Consumer Agency of Canada (2015a): Financial literacy self-assessment quiz. Retrieved September 23, 2015, from http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5159#a1 Financial Consumer Agency of Canada (2015b): National strategy for financial literacy: Count me in, Canada. Retrieved September 29, 2015, from http://www.fcac-acfc.gc.ca/Eng/financialLiteracy/financialLiteracyCanada/strategy/Pages/home-accueil.aspx?WT.mc_id=InfoGraNSFLmainENG Robson, J. (n.d.). Piloting a personal financial literacy quiz in Canada: Results of developmental study. Unpublished document Statistics Canada (2006): Planning report for a Canadian Survey of Financial Capability. Unpublished report. Statistics Canada (2007): Cognitive testing report of the draft questionnaire for the Canadian Survey of Financial Capabilities. Unpublished report. Statistics Canada (2014a): Canadian Financial Capability Survey (CFCS). Retrieved September 23, 2015, from http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5159#a1 Statistics Canada (2014b): Canadian Financial Capability Survey: Public Use Microdata File, 2014. http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&lang=en&Item_Id=201522
Relevant populations:	Adults; Low and Middle income. Available in English, French
URL:	This will be a DOI link generated by Zenodo when the Indicator Reference Sheet is posted. The DOI link will also be added to the 'How to cite this document' field below.
Terms of use for the indicator:	Open Government License – Canada, attributed to Government of Canada
How to cite this document:	Prosper Canada (2016): Change in self-perceived ability to keep track of money. Financial literacy indicator reference sheets. DOI when available. This document is licensed under a Creative Commons Attribution International License 4.0.

Change in automatic deposit set up

Change in automatic deposit set up

Outcome category:	**Savings**
Outcome type:	**Behaviour**

How to use this document:

Indicator Reference Sheets define indicators in enough detail that they can be used to share comparable data across organizations. Users should select indicators that best fit their organization's needs, then select the most useful options for method of measurement, frequency and demographic breakdowns (e.g., age and sex). Options are rated 1 (Highly Recommended), 2 (Recommended) and 3 (Optional). For information about how to use, create or revise Indicator Reference Sheets, see [DOI reference].

Indicator Code: **FIN-Sav-120**

Description:

This indicator measures whether a participant has set up automatic savings. The question is filled out by service providers based on a review of bank statements.

Rationale:

The Center for Financial Services Innovation, as part of their Consumer Financial Health Study (Center for Financial Services Innovation, 2015a), identified eight indicators that would adequately assess financial health. Originally, 20 indicators were identified through the review of data collected from interviews with subject matter experts and other stakeholders, and corroborating the study's findings against that of 20 external consumer finance studies. This list was then refined down to eight key indicators that would give an adequate overall view of a person's financial health.

Each indicator has two forms of metrics that collect financial data and survey data respectively. Choosing which metric to use will depend on a service provider's needs. Overall, financial data has a more quantitative focus that will objectively assess a person's behavior. Survey data focuses on the attitudes and perceptions a person holds about their financial health. The indicators can be used individually, or as a composite scale. Similarly, the metrics for each indicator can be used separately or in tandem with each other. Questions are drawn from or inspired by a variety of sources. (Center for Financial Services Innovation, 2015b)

40 items were included in the list of indicators, out of a total of 41. Note that many items in this instrument are answered by a counsellor on the basis of a document review (e.g., bank statements) rather than survey questions to participants.

Data element:	Automatic deposit or electronic transfer has been set up to put money away for future use • Setup • No setup • n/a
Method of Measurement:	The Center for Financial Services Innovation (CFSI) has developed a method to measure the financial health indicators, using a color scheme. “Next to each metric, we provide suggested benchmarks for how to interpret the data collected. While it is hard to say where the cutoff should be between financially healthy and unhealthy behaviors and attitudes, it is easier to show progress in the direction that we want to see consumers moving. Our draft benchmarks indicate this direction by providing benchmarks in three different colors: green shows behaviors/attitudes that will move someone in the direction of greater financial health; yellow shows behaviors/attitudes that neither move someone significantly toward or away from greater financial health; and red shows behaviors/attitudes that will detract someone from the direction of greater financial health.” (Center for Financial Services Innovation, 2015b) The CFSI benchmark for interpreting the data collected for this indicator is presented below: Automatic deposit or electronic transfer has been set up to put money away for future use? Green: Setup Yellow: No setup Red: n/a Color coding is a good way to visually represent an individual’s financial health condition but it might not be the most suitable tool for measurement of financial empowerment program success for two reasons: 1) It does not provide a clear unit measurement to track program’s progress 2) It does not provide information about the contribution of each answer option. An alternative method of measurement has been developed to enable numerical indication of the change in the data element and to provide representation of the contribution of each answer option to the overall score. This measurement approach is a combination of two separate methods: I. Calculating percent change in the pre and post indicator score; and II. Calculating the relative share of each answer option. These two methods, presented in a combination, display a clear indication of a change that has occurred and provide representation of the underlying data.

	A detailed description of how to calculate and present the results is provided below. The terms ‘program’ and ‘intervention’ will be used interchangeably.	
	1	I. Calculating the percent change between the pre and post indicator score When utilizing the above data element, participants would be asked to answer the question at the beginning of the program (pre-survey) and also near the conclusion of the program (post-survey). Calculating the change in responses will provide information about the indicator of how participants have learned to be more fiscally responsible. This option of assessing results displays a clear and intuitive representation of change that has occurred. Percent increase/decrease in the pre-post indicator score is also a good standardized measure that allows comparison between financial empowerment program elements. Ideally, the program could set a numerical standard (target) to measure actual change against desired change. The change in difference is represented by a percentage number, which shows the difference between the post intervention score and the pre intervention score following the formula: ((post intervention score)-(pre intervention score)/(pre intervention score))*100. The numerator is the difference between the post intervention score and the pre intervention score. The denominator is the pre intervention score. The numerator is divided by the denominator and then multiplied by a factor of 100 to present a percentage value. Calculation of pre and post intervention scores Pre intervention and post intervention scores are calculated identically, with the difference that pre intervention numerator and denominator are calculated using the number of responses recorded before the intervention and the post intervention numerator and denominator are calculated using the number of responses recorded after the intervention. The pre intervention and post intervention scores are arithmetic means, derived by dividing a pre/post numerator to pre/post denominator. The pre/post numerator is a composite of the following two data components: • Setup = 1 • No setup = 0 • n/a = 0 To calculate the nominator, use the following formula ((number of responses to “Setup” x 1) + (number of responses to “No setup” x 0) + (number of responses to “n/a” x 0)) The denominator is the sum of the responses to each answer option (the

total responses to the indicator question).

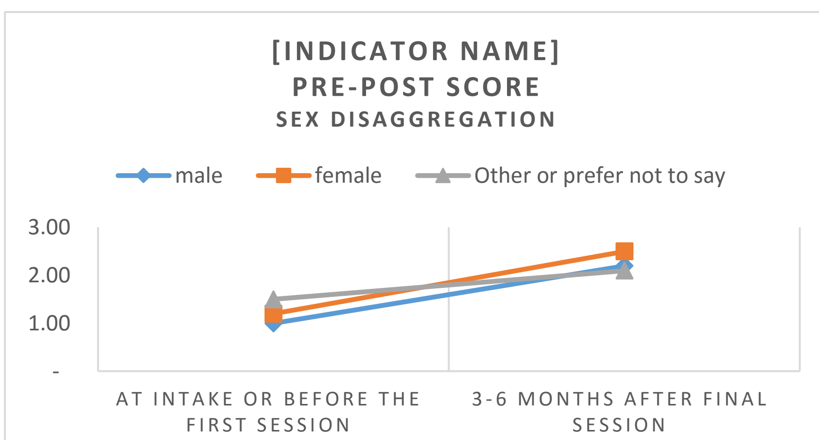
To calculate the denominator, use the following formula ((number of responses to “Setup”) + (number of responses to “No setup”) + (number of responses to “n/a”)).

The pre and post intervention score method described above is used to calculate the aggregate average data element score of all program participants. The individual (personal) score is simply the point assigned to the provided answer option.

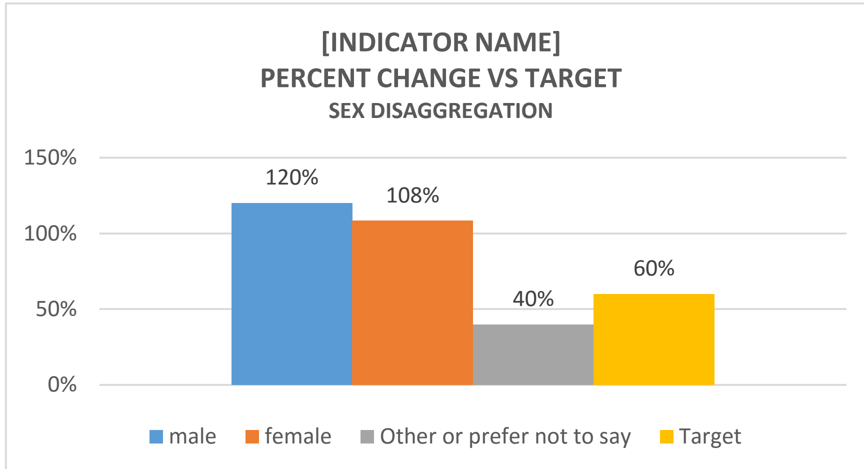
II. Calculating the relative share of each answer option (Recommended approach)

This method is used to calculate the relative share of each answer option, expressed in percentages. The relative share of each answer option is calculated separately. The numerator is the number of responses to the respective answer option and the denominator is the total number of responses to the question. The numerator is divided by the denominator and then multiplied by a numerical factor of 100 to create a percentage value. For accurate representation of the data the sum of the relative shares of each answer option must equal a 100% figure.
These calculations are performed in the beginning of the program, using the data then obtained and at the end of the program with the updated answer options. The results are compared and the changes are analyzed.

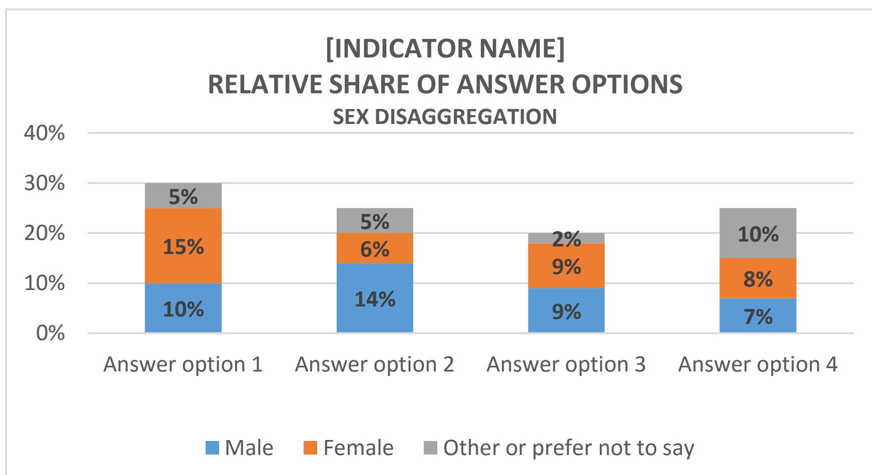
Reporting type:
The results of the measurement could be summarized in a table or chart format. Three chart templates are provided below. Presented altogether, the charts provide comprehensive information of the program score, the change that has occurred, as well as additional information of the underlying data.



The chart illustrates the indicator score before or during the program and the indicator score after the program completion, disaggregated by sex.



The chart illustrates the percent change in the indicator score before and after the program, disaggregated by sex. A targeted percent change could be added and measured against.



The chart illustrates the relative share of each answer option of the data element, disaggregated by sex.

IMPORTANT NOTES:

1. Make sure that post intervention results are accompanied by the program dropout rate and that the responses to the pre intervention survey of the people who dropped out are analyzed to determine their impact on post survey results (indicator is in development).

2. When targeted changes in indicator scores are set make sure that the pre intervention score is compared to the maximum possible indicator score to examine the boundaries. This will enable the appropriate target determination and correct interpretation of results. For example,

		assuming the pre-program indicator score is 0.8 points out of a maximum of 2.0 points the maximum improvement possible is 1.2 points, which is a 150%. When analyzing the results, users should mind the maximum possible change, rather than the intuitive change of 100%. 3. The methods of measurement and the respective chart templates, suggested for reporting might not be comprehensive in presenting and explaining program results. A further calculation, analysis, description and data presentation might be necessary to interpret the results. For example, when examining why female positive change is lower than male positive change, the reason could be that either female had considerably higher score in the beginning of the program (not much room for improvement) or the program did not have such a positive impact on women as it had on men. Further analysis of the pre-post scores is need to reach to a conclusion.
	2	
	3	
Data Collection Frequency:	**1**	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 3-6 months after final session
	2	Pre-Post Intervention Data Collection Pre: At intake or before the first session Post: at final session or within two months of final session
	3	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 7 months or more after completion of a financial empowerment program
Data Source:	The financial data is collected by the financial coach from relevant financial information.	
Numerator:	**1**	I. Calculating change by using a differential percentage from the pre and post indicator score The numerator is a numerical representation of the difference between the post intervention score and the pre intervention score. A detailed description of how to calculate the pre intervention and post intervention scores is provided in the "Method of Measurement" section in this document.

		II. Calculating the relative share of each answer option Each answer option in the data element is individually calculated and expressed in percentage values. The numerator is the total number of responses the respective answer option received.
	2	
	3	
Denominator:	1	I. Calculating change by using a differential percentage from the pre and post indicator score The denominator is the pre intervention score. A detailed description of how to calculate the pre intervention score is provided in the "Method of Measurement" section in this document. II. Calculating the relative share of each answer option The denominator is the total number of responses to the indicator question.
	2	
	3	
Disaggregation(s):	1	Age (17 and younger; 18-24; 25-29; 30-39; 40-54; 55-64; 65-74; 75 and over; Prefer not to say) Sex (Male; Female; Other or prefer not to say) Age/Sex disaggregates: 17 and younger male, 17 and younger female, 17 and younger other; 18-24 male, 18-24 female, 18-24 other; 25-29 male, 25-29 female, 25-29 other; 30-39 male, 30-39 female, 30-39 other; 40-54 male, 40-54 female, 40-54 other; 55-64 male, 55-64 female, 55-64 other; 65-74 male, 65-74 female, 65-74 other; 75 and over male, 75 and over female, 75 and over other; Prefer not to say male, Prefer not to say female, prefer not to say other
	2	Age (19 and younger; 20-29; 30-39; 40-49; 50-59; 60-69; 70 and over; Prefer not to say) Sex (Male; Female; Prefer not to say) Age/Sex disaggregates: 19 and younger male, 19 and younger female; 19 and younger prefer not to say; 20-29 male, 20-29 female, 20-29 prefer not to say; 30-39 male, 30-39 female, 30-39 prefer not to say; 40-49 male, 40-49 female, 40-49 prefer not to say; 50-59 male, 50-59 female, 50-59 prefer not to say; 60-69 male, 60-69 female, 60-69 prefer not to say; 70

		and over male, 70 and over female, 70 and over prefer not to say; Prefer not to say male, prefer not to say female, prefer not to say for age - prefer not to say for sex
References:	Center for Financial Services Innovation. (2015a). Understanding and improving consumer financial health in America. Center for Financial Services Innovation. Center for Financial Services Innovation. (2015b, September). Measuring financial health. Center for Financial Services Innovation.	
Relevant populations:	Adults; Low and Middle income. Available in English	
URL:	This will be a DOI link generated by Zenodo when the Indicator Reference Sheet is posted. The DOI link will also be added to the 'How to cite this document' field below.	
Terms of use for the indicator:	To be confirmed	
How to cite this document:	Prosper Canada (2016): Change in automatic deposit set up. Financial literacy indicator reference sheets. DOI when available. This document is licensed under a Creative Commons Attribution International License 4.0.	

Change in satisfaction with financial situation

Change in satisfaction with financial situation

Outcome category:	**Goals progress**
Outcome type:	**Knowledge-Attitudes-Skills-Aspirations**

How to use this document:
Indicator Reference Sheets define indicators in enough detail that they can be used to share comparable data across organizations. Users should select indicators that best fit their organization's needs, then select the most useful options for method of measurement, frequency and demographic breakdowns (e.g., age and sex). Options are rated 1 (Highly Recommended), 2 (Recommended) and 3 (Optional). For information about how to use, create or revise Indicator Reference Sheets, see [DOI reference].

Indicator Code: **FIN-Goals-102**

Description:

This indicator measures the cahnge in the level of satisfaction with financial situation

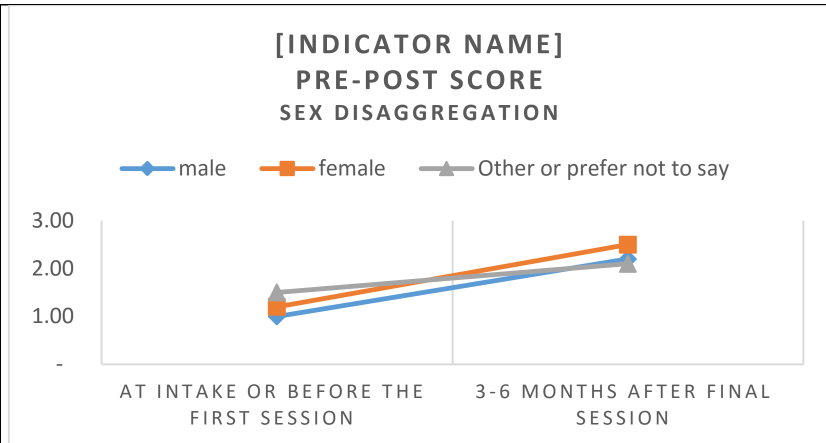
Rationale:

Statistics Canada carries out a major population health survey every year that includes a wide range of questions on health and well-being. The number of items varies according to the year. We have identified questions that can be included in outcome measures for any community agency, to ensure that issues relating to finances are being considered when working with people living on low incomes. (Government of Canada, 2015)
Two questions are selected out of a large population survey covering dozens of topics (including health conditions, smoking, exercise, food security, waiting times for health care, etc.).

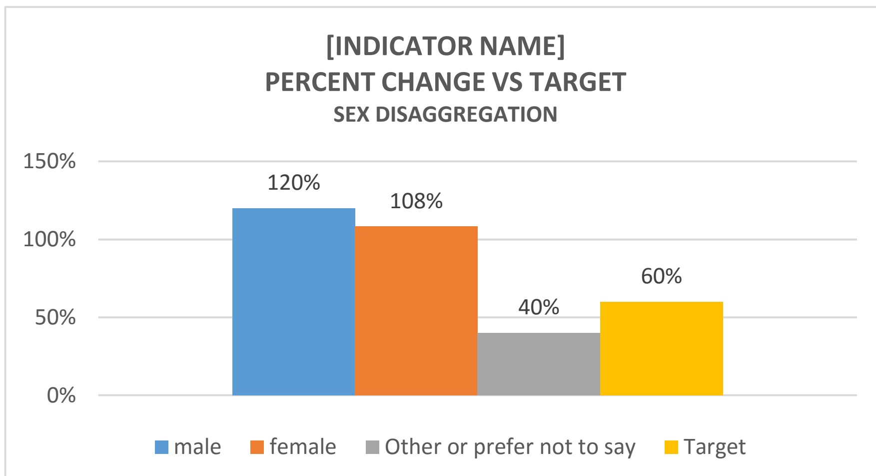
Data element:	(How satisfied are you) with your financial situation? • Very satisfied • Satisfied • Neither satisfied nor dissatisfied • Dissatisfied • Very dissatisfied • Refuse to answer • Don't know
Method of Measurement:	A method of measurement has been developed to enable numerical indication of the change in the data element and to provide representation of the contribution of each answer option to the overall score. This measurement approach is a combination of two separate methods: I. Calculating percent change in the pre and post indicator score; and II. Calculating the relative share of each answer option. These two methods, presented in a combination, display a clear indication of a change that has occurred and provide representation of the underlying data.

	A detailed description of how to calculate and present the results is provided below. The terms ‘program’ and ‘intervention’ will be used interchangeably.	
	1	I. Calculating the percent change between the pre and post indicator score When utilizing the above data element, participants would be asked to answer the question at the beginning of the program (pre-survey) and also near the conclusion of the program (post-survey). Calculating the change in responses will provide information about the indicator of how participants have learned to be more fiscally responsible. This option of assessing results displays a clear and intuitive representation of change that has occurred. Percent increase/decrease in the pre-post indicator score is also a good standardized measure that allows comparison between financial empowerment program elements. Ideally, the program could set a numerical standard (target) to measure actual change against desired change. The change in difference is represented by a percentage number, which shows the difference between the post intervention score and the pre intervention score following the formula: ((post intervention score)-(pre intervention score)/(pre intervention score))*100. The numerator is the difference between the post intervention score and the pre intervention score. The denominator is the pre intervention score. The numerator is divided by the denominator and then multiplied by a factor of 100 to present a percentage value. Calculation of pre and post intervention scores Pre intervention and post intervention scores are calculated identically, with the difference that pre intervention numerator and denominator are calculated using the number of responses recorded before the intervention and the post intervention numerator and denominator are calculated using the number of responses recorded after the intervention. The pre intervention and post intervention scores are arithmetic means, derived by dividing a pre/post numerator to pre/post denominator. The pre/post numerator is a composite of the following two data components: 1. Number of responses to each answer option 2. The score attributed to each answer option The pre/post numerator is calculated by multiplying the total number of responses of each answer option by the respective score and adding the results. The values attributed to each answer options are as follows: • Very satisfied = 2 • Satisfied = 1 • Neither satisfied nor dissatisfied = 0 • Dissatisfied = -1 • Very dissatisfied = -2 • Refuse to answer = 0 • Don't know = 0 To calculate the nominator, use the following formula ((number of responses to

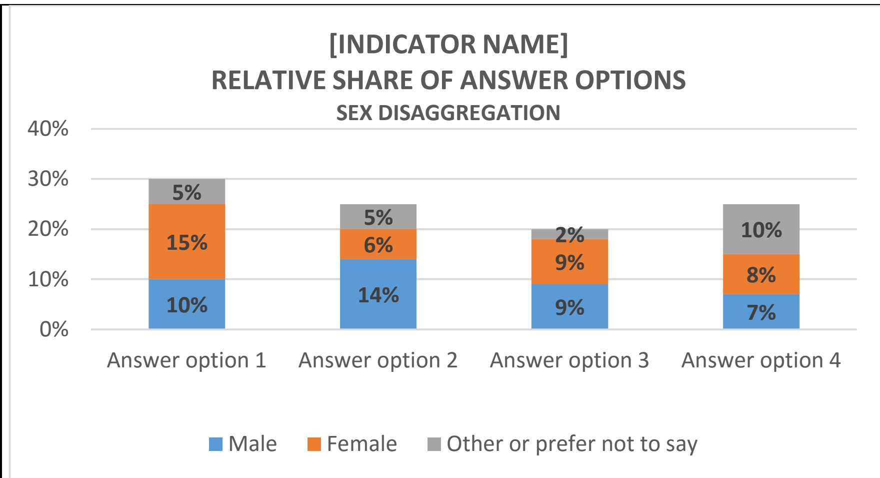
		“Very satisfied” x 2) + (number of responses to “Satisfied” x 1)+ (number of responses to “Neither satisfied nor dissatisfied” x 0) + (number of responses to “Dissatisfied” x -1) + (number of responses to “Very dissatisfied” x -2) + (number of responses to “Refuse to answer” x 0) + (number of responses to “Don't know” x 0)) The denominator is the sum of the responses to each answer option (the total responses to the indicator question). To calculate the denominator, use the following formula ((number of responses to “Very satisfied”) + (number of responses to “Satisfied”)+ (number of responses to “Neither satisfied nor dissatisfied”) + (number of responses to “Dissatisfied”) + (number of responses to “Very dissatisfied”) + (number of responses to “Refuse to answer”) + (number of responses to “Don't know”)). The pre and post intervention score method described above is used to calculate the aggregate average data element score of all program participants. The individual (personal) score is simply the point assigned to the provided answer option. II. Calculating the relative share of each answer option (Recommended approach) This method is used to calculate the relative share of each answer option, expressed in percentages. The relative share of each answer option is calculated separately. The numerator is the number of responses to the respective answer option and the denominator is the total number of responses to the question. The numerator is divided by the denominator and then multiplied by a numerical factor of 100 to create a percentage value. For accurate representation of the data the sum of the relative shares of each answer option must equal a 100% figure. These calculations are performed in the beginning of the program, using the data then obtained and at the end of the program with the updated answer options. The results are compared and the changes are analyzed. Reporting type: The results of the measurement could be summarized in a table or chart format. Three chart templates are provided below. Presented altogether, the charts provide comprehensive information of the program score, the change that has occurred, as well as additional information of the underlying data.



The chart illustrates the indicator score before or during the program and the indicator score after the program completion, disaggregated by sex.



The chart illustrates the percent change in the indicator score before and after the program, disaggregated by sex. A targeted percent change could be added and measured against.

		 The chart illustrates the relative share of each answer option of the data element, disaggregated by sex. IMPORTANT NOTES: 1. Make sure that post intervention results are accompanied by the program dropout rate and that the responses to the pre intervention survey of the people who dropped out are analyzed to determine their impact on post survey results (indicator is in development). 2. When targeted changes in indicator scores are set make sure that the pre intervention score is compared to the maximum possible indicator score to examine the boundaries. This will enable the appropriate target determination and correct interpretation of results. For example, assuming the pre-program indicator score is 0.8 points out of a maximum of 2.0 points the maximum improvement possible is 1.2 points, which is a 150%. When analyzing the results, users should mind the maximum possible change, rather than the intuitive change of 100%. 3. The methods of measurement and the respective chart templates, suggested for reporting might not be comprehensive in presenting and explaining program results. A further calculation, analysis, description and data presentation might be necessary to interpret the results. For example, when examining why female positive change is lower than male positive change, the reason could be that either female had considerably higher score in the beginning of the program (not much room for improvement) or the program did not have such a positive impact on women as it had on men. Further analysis of the pre-post scores is need to reach to a conclusion.
	2	0
	3	0

<table>
<tr><td rowspan="3">Data Collection Frequency:</td><td>1</td><td>Pre-Post Intervention Data Collection
Pre: At intake or before the first session of a financial empowerment program
Post: 3-6 months after final session</td></tr>
<tr><td>2</td><td>Pre-Post Intervention Data Collection
Pre: At intake or before the first session
Post: at final session or within two months of final session</td></tr>
<tr><td>3</td><td>Pre-Post Intervention Data Collection
Pre: At intake or before the first session of a financial empowerment program
Post: 7 months or more after completion of a financial empowerment program</td></tr>
<tr><td>Data Source:</td><td colspan="2">The survey question is answered by the program participants with or without assistance. The answers to the question may be read aloud or included in a written survey.</td></tr>
<tr><td rowspan="3">Numerator:</td><td>1</td><td>I. Calculating change by using a differential percentage from the pre and post indicator score

The numerator is a numerical representation of the difference between the post intervention score and the pre intervention score.
A detailed description of how to calculate the pre intervention and post intervention scores is provided in the “Method of Measurement” section in this document.

II. Calculating the relative share of each answer option

Each answer option in the data element is individually calculated and expressed in percentage values. The numerator is the total number of responses the respective answer option received.</td></tr>
<tr><td>2</td><td></td></tr>
<tr><td>3</td><td></td></tr>
<tr><td rowspan="2">Denominator:</td><td>1</td><td>I. Calculating change by using a differential percentage from the pre and post indicator score

The denominator is the pre intervention score.
A detailed description of how to calculate the pre intervention score is provided in the “Method of Measurement” section in this document.

II. Calculating the relative share of each answer option

The denominator is the total number of responses to the indicator question.</td></tr>
<tr><td>2</td><td>0</td></tr>
</table>

	3	0
Disaggregation(s):	**1**	Age (17 and younger; 18-24; 25-29; 30-39; 40-54; 55-64; 65-74; 75 and over; Prefer not to say) Sex (Male; Female; Other or prefer not to say) Age/Sex disaggregates: 17 and younger male, 17 and younger female, 17 and younger other; 18-24 male, 18-24 female, 18-24 other; 25-29 male, 25-29 female, 25-29 other; 30-39 male, 30-39 female, 30-39 other; 40-54 male, 40-54 female, 40-54 other; 55-64 male, 55-64 female, 55-64 other; 65-74 male, 65-74 female, 65-74 other; 75 and over male, 75 and over female, 75 and over other; Prefer not to say male, Prefer not to say female, prefer not to say other
	2	Age (19 and younger; 20-29; 30-39; 40-49; 50-59; 60-69; 70 and over; Prefer not to say) Sex (Male; Female; Prefer not to say) Age/Sex disaggregates: 19 and younger male, 19 and younger female; 19 and younger prefer not to say; 20-29 male, 20-29 female, 20-29 prefer not to say; 30-39 male, 30-39 female, 30-39 prefer not to say; 40-49 male, 40-49 female, 40-49 prefer not to say; 50-59 male, 50-59 female, 50-59 prefer not to say; 60-69 male, 60-69 female, 60-69 prefer not to say; 70 and over male, 70 and over female, 70 and over prefer not to say; Prefer not to say male, prefer not to say female, prefer not to say for age - prefer not to say for sex
References:	Government of Canada, S. C. (2015, January 1). Canadian Community Health Survey - Annual Component (CCHS). Retrieved October 13, 2015, from http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3226&InstaId=238854&SurvId=238855	
Relevant populations:	Adults; Low and Middle income. Available in English, French	
URL:	This will be a DOI link generated by Zenodo when the Indicator Reference Sheet is posted. The DOI link will also be added to the ‘How to cite this document’ field below.	
Terms of use for the indicator:	To be confirmed	
How to cite this document:	Prosper Canada (2016): Change in satisfaction with financial situation. Financial literacy indicator reference sheets. Zenodo. DOI when available. This document is licensed under a Creative Commons Attribution International License 4.0.	

Change in emergency funds

Change in emergency funds

Outcome category:	**Money management**
Outcome type:	**Behaviour**

How to use this document:
Indicator Reference Sheets define indicators in enough detail that they can be used to share comparable data across organizations. Users should select indicators that best fit their organization's needs, then select the most useful options for method of measurement, frequency and demographic breakdowns (e.g., age and sex). Options are rated 1 (Highly Recommended), 2 (Recommended) and 3 (Optional). For information about how to use, create or revise Indicator Reference Sheets, see [DOI reference].

Indicator Code: **FIN-Mgmt-106**

Description:

This indicator measures the change in emergency funds set aside. Contingency funds provide liquidity and signal planning and foresight.

Rationale:

The University of Wisconsin-Madison's Center for Financial Security developed an instrument to assess financial capability in 2011. The instrument, an eight item survey, was created from the findings of the "Financial Coaching Outcomes Measures Project" that sought to define a short list of standardized measures reliable enough to be considered benchmarks for assessing one's financial health. Four organizations (Bon Secours, the Financial Clinic, LISC Chicago and the University of Wisconsin-Extension) aggregated their data for client outcomes, in order to identify which measures were consistently used across service providers. The data was then assessed to determine which measures were reliable and valid for evaluating one's financial health. Once the eight measures were identified, they were again tested both individually and as a composite scale using cross sections of aggregated data from the four organizations to determine their predictive ability for an area of financial health. This scale is designed and validated specifically to assess outcomes of financial counselling interventions (Collins & O'Rourke, 2013).
All questions out of a total of 8 items including a qualitative response were selected from this instrument.

Data element:	If you had an unexpected expense or someone in your family lost a job, got sick or had another emergency, how confident are you that your family could come up with money to make ends meet within a month? • Not at all confident • Somewhat confident • Very confident

<table>
<tr>
<td rowspan="2">Method of Measurement:</td>
<td colspan="2">The authors of the Financial Capability Scale (FCS) suggest the following method to measure the data element at the start of a program and again at a later date:

If you had an unexpected expense or someone in your family lost a job, got sick or had another emergency, how confident are you that your family could come up with money to make ends meet within a month?
• Not at all confident = 0
• Somewhat confident = 1
• Very confident = 2

Although the Financial Capability Scale is presented along with a method to use and measure the instrument, no clear indication exists as to how to measure the change in score between two time periods. A complementary method of measurement has been developed to enable numerical indication of the change in the data element and to provide representation of the contribution of each answer option to the overall score. This measurement approach is a combination of two separate methods: I. Calculating percent change in the pre and post indicator score; and II. Calculating the relative share of each answer option. These two methods, presented in a combination, display a clear indication of a change that has occurred and provide representation of the underlying data.

A detailed description of how to calculate and present the results is provided below. The terms ‘program’ and ‘intervention’ will be used interchangeably.</td>
</tr>
<tr>
<td>1</td>
<td>I. Calculating the percent change between the pre and post indicator score

When utilizing the above data element, participants would be asked to answer the question at the beginning of the program (pre-survey) and also near the conclusion of the program (post-survey). Calculating the change in responses will provide information about the indicator of how participants have learned to be more fiscally responsible. This option of assessing results displays a clear and intuitive representation of change that has occurred. Percent increase/decrease in the pre-post indicator score is also a good standardized measure that allows comparison between financial empowerment program elements. Ideally, the program could set a numerical standard (target) to measure actual change against desired change.

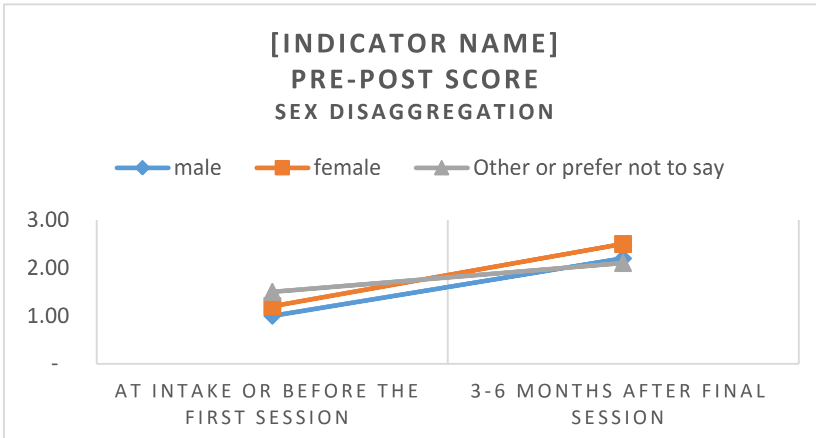
The change in difference is represented by a percentage number, which shows the difference between the post intervention score and the pre intervention score following the formula: ((post intervention score)-(pre intervention score)/(pre intervention score))*100. The numerator is the difference between the post intervention score and the pre intervention score. The denominator is the pre intervention score. The numerator is divided by the denominator and then multiplied by a factor of 100 to present a percentage value.

Calculation of pre and post intervention scores</td>
</tr>
</table>

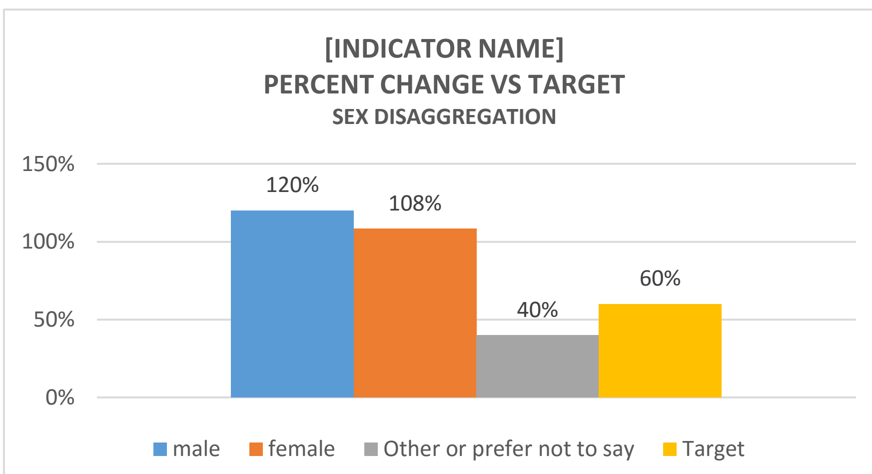
		Pre intervention and post intervention scores are calculated identically, with the difference that pre intervention numerator and denominator are calculated using the number of responses recorded before the intervention and the post intervention numerator and denominator are calculated using the number of responses recorded after the intervention. The pre intervention and post intervention scores are arithmetic means, derived by dividing a pre/post numerator to pre/post denominator. The pre/post numerator is a composite of the following two data components: 1. Number of responses to each answer option 2. The score attributed to each answer option The pre/post numerator is calculated by multiplying the total number of responses of each answer option by the respective score and adding the results. The values attributed to each answer options are as follows: • Not at all confident = 0 • Somewhat confident = 1 • Very confident = 2 To calculate the nominator, use the following formula ((number of responses to “ Not at all confident ” x 0) + (number of responses to “ Somewhat confident ” x 1) + (number of responses to “ Very confident ” x 2)) The denominator is the sum of the responses to each answer option (the total responses to the indicator question). To calculate the denominator, use the following formula ((number of responses to “ Not at all confident ”) + (number of responses to “ Somewhat confident ”) + (number of responses to “ Very confident ”)) The pre and post intervention score method described above is used to calculate the aggregate average data element score of all program participants. The individual (personal) score is simply the point assigned to the provided answer option. II. Calculating the relative share of each answer option (Recommended approach) This method is used to calculate the relative share of each answer option, expressed in percentages. The relative share of each answer option is calculated separately. The numerator is the number of responses to the respective answer option and the denominator is the total number of responses to the question. The numerator is divided by the denominator and then multiplied by a numerical factor of 100 to create a percentage value. For accurate representation of the data the sum of the relative shares of each answer option must equal a 100% figure. These calculations are performed in the beginning of the program, using

the data then obtained and at the end of the program with the updated answer options. The results are compared and the changes are analyzed.

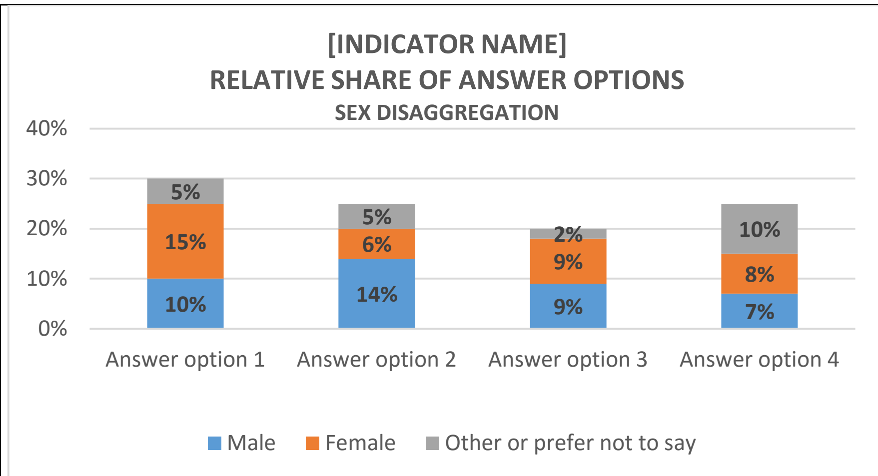
Reporting type:
The results of the measurement could be summarized in a table or chart format. Three chart templates are provided below. Presented altogether, the charts provide comprehensive information of the program score, the change that has occurred, as well as additional information of the underlying data.



The chart illustrates the indicator score before or during the program and the indicator score after the program completion, disaggregated by sex.



The chart illustrates the percent change in the indicator score before and after the program, disaggregated by sex. A targeted percent change could be added and measured against.



The chart illustrates the relative share of each answer option of the data element, disaggregated by sex.

IMPORTANT NOTES:
1. Make sure that post intervention results are accompanied by the program dropout rate and that the responses to the pre intervention survey of the people who dropped out are analyzed to determine their impact on post survey results (indicator is in development).

2. When targeted changes in indicator scores are set make sure that the pre intervention score is compared to the maximum possible indicator score to examine the boundaries. This will enable the appropriate target determination and correct interpretation of results. For example, assuming the pre-program indicator score is 0.8 points out of a maximum of 2.0 points the maximum improvement possible is 1.2 points, which is a 150%. When analyzing the results, users should mind the maximum possible change, rather than the intuitive change of 100%.

3. The methods of measurement and the respective chart templates, suggested for reporting might not be comprehensive in presenting and explaining program results. A further calculation, analysis, description and data presentation might be necessary to interpret the results. For example, when examining why female positive change is lower than male positive change, the reason could be that either female had considerably higher score in the beginning of the program (not much room for improvement) or the program did not have such a positive impact on women as it had on men. Further analysis of the pre-post scores is need to reach to a conclusion.

2	
3	

Data Collection Frequency:	**1**	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 3-6 months after final session
	2	Pre-Post Intervention Data Collection Pre: At intake or before the first session Post: at final session or within two months of final session
	3	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 7 months or more after completion of a financial empowerment program
Data Source:	The survey question is answered by the program participants with or without assistance. The answers to the question may be read aloud or included in a written survey.	
Numerator:	**1**	I. Calculating change by using a differential percentage from the pre and post indicator score The numerator is a numerical representation of the difference between the post intervention score and the pre intervention score. A detailed description of how to calculate the pre intervention and post intervention scores is provided in the "Method of Measurement" section in this document. II. Calculating the relative share of each answer option Each answer option in the data element is individually calculated and expressed in percentage values. The numerator is the total number of responses the respective answer option received.
	2	
	3	
Denominator:	**1**	I. Calculating change by using a differential percentage from the pre and post indicator score The denominator is the pre intervention score. A detailed description of how to calculate the pre intervention score is provided in the "Method of Measurement" section in this document. II. Calculating the relative share of each answer option

		The denominator is the total number of responses to the indicator question.
	2	
	3	
Disaggregation(s):	**1**	Age (17 and younger; 18-24; 25-29; 30-39; 40-54; 55-64; 65-74; 75 and over; Prefer not to say) Sex (Male; Female; Other or prefer not to say) Age/Sex disaggregates: 17 and younger male, 17 and younger female, 17 and younger other; 18-24 male, 18-24 female, 18-24 other; 25-29 male, 25-29 female, 25-29 other; 30-39 male, 30-39 female, 30-39 other; 40-54 male, 40-54 female, 40-54 other; 55-64 male, 55-64 female, 55-64 other; 65-74 male, 65-74 female, 65-74 other; 75 and over male, 75 and over female, 75 and over other; Prefer not to say male, Prefer not to say female, prefer not to say other
	2	Age (19 and younger; 20-29; 30-39; 40-49; 50-59; 60-69; 70 and over; Prefer not to say) Sex (Male; Female; Prefer not to say) Age/Sex disaggregates: 19 and younger male, 19 and younger female; 19 and younger prefer not to say; 20-29 male, 20-29 female, 20-29 prefer not to say; 30-39 male, 30-39 female, 30-39 prefer not to say; 40-49 male, 40-49 female, 40-49 prefer not to say; 50-59 male, 50-59 female, 50-59 prefer not to say; 60-69 male, 60-69 female, 60-69 prefer not to say; 70 and over male, 70 and over female, 70 and over prefer not to say; Prefer not to say male, prefer not to say female, prefer not to say for age - prefer not to say for sex
References:	Asset Funders Network. (n.d.). Financial coaching and the Financial Capability Scale: Guide to using the scale. Retrieved November 30, 2015, from http://assetfunders.org/images/pages/FCS_Guide_to_Using_the_Scale_Strategy_Spotlight_FINAL.pdf Collins, J., & O'Rourke, C. (2013). Finding a yardstick: Field testing outcome measures for community-based financial coaching and capability programs. Center for Financial Security, University of Wisconsin-Madison.	

Relevant populations:	Adults; Low and Middle income. Available in English
URL:	This will be a DOI link generated by Zenodo when the Indicator Reference Sheet is posted. The DOI link will also be added to the 'How to cite this document' field below.
Terms of use for the indicator:	To be confirmed
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Change in ability to pay bills on time

Change in ability to pay bills on time

Outcome category:	**Major loans**
Outcome type:	**Behaviour**

How to use this document:
Indicator Reference Sheets define indicators in enough detail that they can be used to share comparable data across organizations. Users should select indicators that best fit their organization's needs, then select the most useful options for method of measurement, frequency and demographic breakdowns (e.g., age and sex). Options are rated 1 (Highly Recommended), 2 (Recommended) and 3 (Optional). For information about how to use, create or revise Indicator Reference Sheets, see [DOI reference].

Indicator Code: **FIN-Loan-162**

Description:

The indicator is a survey question intended to measure the ability to pay bills on time. Late fees indicate money management problem and hurt credit standing.

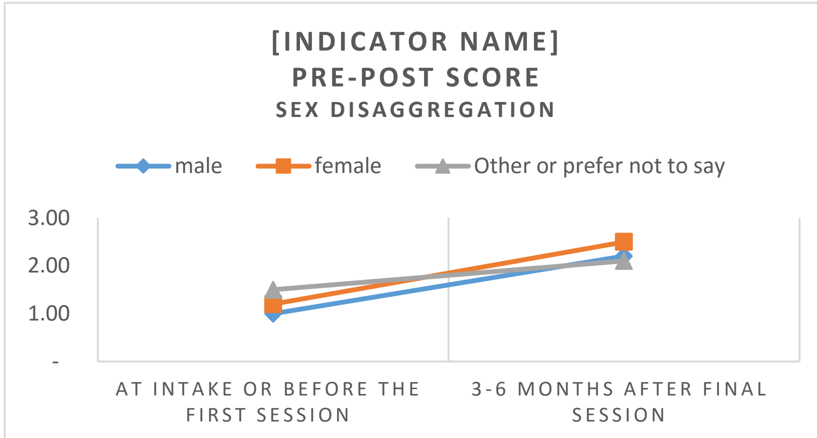
Rationale:

These questions were taken from a set of evaluation tools developed by Prosper Canada and funded by the Investment Industry Regulatory Organization of Canada (IIROC) in 2011-2013 to enable community organizations to measure, report on, and enhance the impact of their financial literacy education activities. The tools include pre-post surveys to measure outcomes as well as consent and release forms, demographic questionnaires, draft logic models and so on, and are available on Prosper Canada's web site. The survey questions were developed through a national consultation process including service providers and academic advisors. The tools were intended to provide a common set of

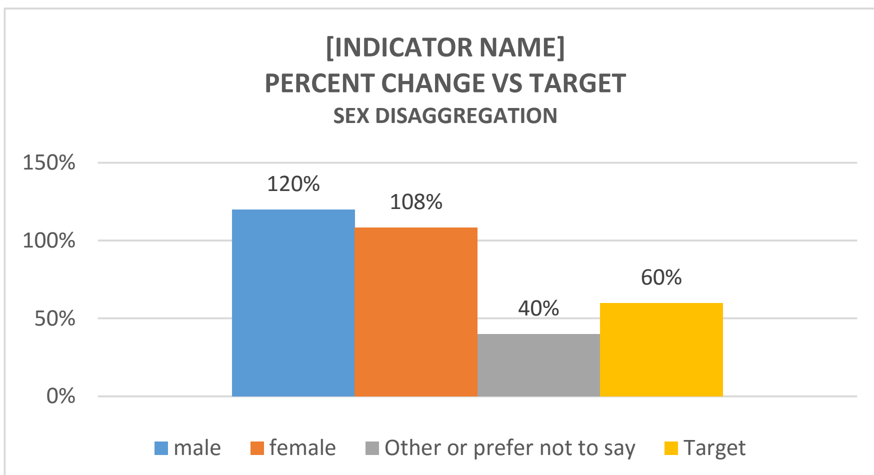
evaluation instruments for Canadian community organizations providing financial services to adults living on low incomes. (Prosper Canada, 2012b) See http://prospercanada.org/Resources/Financial-Literacy-Evaluation-Tools/Tracking-Outcomes.aspx 16 questions were taken from a post-intervention survey of 36 items.		
Data element:	Over the last year, have you been late by 2 months or more on a bill or other payment? (examples: cell phone, rent or utilities) • Yes • No • I don’t know	
Method of Measurement:	A method of measurement has been developed to enable numerical indication of the change in the data element and to provide representation of the contribution of each answer option to the overall score. This measurement approach is a combination of two separate methods: I. Calculating percent change in the pre and post indicator score; and II. Calculating the relative share of each answer option. These two methods, presented in a combination, display a clear indication of a change that has occurred and provide representation of the underlying data. A detailed description of how to calculate and present the results is provided below. The terms ‘program’ and ‘intervention’ will be used interchangeably.	
	1	I. Calculating the percent change between the pre and post indicator score When utilizing the above data element, participants would be asked to answer the question at the beginning of the program (pre-survey) and also near the conclusion of the program (post-survey). Calculating the change in responses will provide information about the indicator of how participants have learned to be more fiscally responsible. This option of assessing results displays a clear and intuitive representation of change that has occurred. Percent increase/decrease in the pre-post indicator score is also a good standardized measure that allows comparison between financial empowerment program elements. Ideally, the program could set a numerical standard (target) to measure actual change against desired change. The change in difference is represented by a percentage number, which shows the difference between the post intervention score and the pre intervention score following the formula: ((post intervention score)-(pre intervention score)/(pre intervention score))*100. The numerator is the difference between the post intervention score and the pre intervention score. The denominator is the pre intervention score. The numerator is divided by the denominator and then multiplied by a factor of 100 to present a percentage value. Calculation of pre and post intervention scores Pre intervention and post intervention scores are calculated identically, with the difference that pre intervention numerator and denominator are

		calculated using the number of responses recorded before the intervention and the post intervention numerator and denominator are calculated using the number of responses recorded after the intervention. The pre intervention and post intervention scores are arithmetic means, derived by dividing a pre/post numerator to pre/post denominator. The pre/post numerator is a composite of the following two data components: 1. Number of responses to each answer option 2. The score attributed to each answer option The pre/post numerator is calculated by multiplying the total number of responses of each answer option by the respective score and adding the results. The values attributed to each answer options are as follows: • Yes = 0 • No = 1 • Don't know = 0 To calculate the nominator, use the following formula ((number of responses to “Yes” x 0) + (number of responses to “No” x 0)+ (number of responses to “Don't know” x 1)) The denominator is the sum of the responses to each answer option (the total responses to the indicator question). To calculate the denominator, use the following formula ((number of responses to “Yes”) + (number of responses to “No”)+(number of responses to “Don't know”)). The pre and post intervention score method described above is used to calculate the aggregate average data element score of all program participants. The individual (personal) score is simply the point assigned to the provided answer option. II. Calculating the relative share of each answer option (Recommended approach) This method is used to calculate the relative share of each answer option, expressed in percentages. The relative share of each answer option is calculated separately. The numerator is the number of responses to the respective answer option and the denominator is the total number of responses to the question. The numerator is divided by the denominator and then multiplied by a numerical factor of 100 to create a percentage value. For accurate representation of the data the sum of the relative shares of each answer option must equal a 100% figure. These calculations are performed in the beginning of the program, using the data then obtained and at the end of the program with the updated answer options. The results are compared and the changes are analyzed.

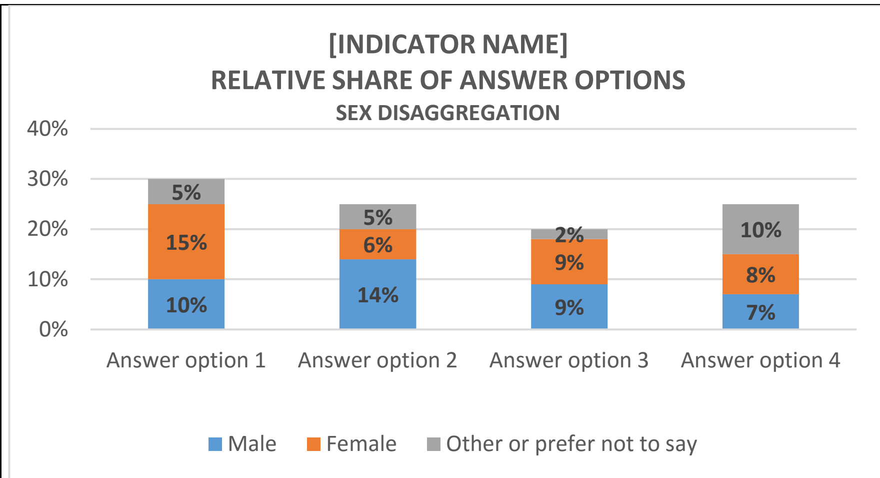
		Reporting type: The results of the measurement could be summarized in a table or chart format. Three chart templates are provided below. Presented altogether, the charts provide comprehensive information of the program score, the change that has occurred, as well as additional information of the underlying data.



The chart illustrates the indicator score before or during the program and the indicator score after the program completion, disaggregated by sex.



The chart illustrates the percent change in the indicator score before and after the program, disaggregated by sex. A targeted percent change could be added and measured against.

		 The chart illustrates the relative share of each answer option of the data element, disaggregated by sex. IMPORTANT NOTES: 1. Make sure that post intervention results are accompanied by the program dropout rate and that the responses to the pre intervention survey of the people who dropped out are analyzed to determine their impact on post survey results (indicator is in development). 2. When targeted changes in indicator scores are set make sure that the pre intervention score is compared to the maximum possible indicator score to examine the boundaries. This will enable the appropriate target determination and correct interpretation of results. For example, assuming the pre-program indicator score is 0.8 points out of a maximum of 2.0 points the maximum improvement possible is 1.2 points, which is a 150%. When analyzing the results, users should mind the maximum possible change, rather than the intuitive change of 100%. 3. The methods of measurement and the respective chart templates, suggested for reporting might not be comprehensive in presenting and explaining program results. A further calculation, analysis, description and data presentation might be necessary to interpret the results. For example, when examining why female positive change is lower than male positive change, the reason could be that either female had considerably higher score in the beginning of the program (not much room for improvement) or the program did not have such a positive impact on women as it had on men. Further analysis of the pre-post scores is need to reach to a conclusion.
	2	
	3	

Data Collection Frequency:	1	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 3-6 months after final session
	2	Pre-Post Intervention Data Collection Pre: At intake or before the first session Post: at final session or within two months of final session
	3	Pre-Post Intervention Data Collection Pre: At intake or before the first session of a financial empowerment program Post: 7 months or more after completion of a financial empowerment program
Data Source:	The survey question is answered by the program participants with or without assistance. The answers to the question may be read aloud or included in a written survey.	
Numerator:	1	I. Calculating change by using a differential percentage from the pre and post indicator score The numerator is a numerical representation of the difference between the post intervention score and the pre intervention score. A detailed description of how to calculate the pre intervention and post intervention scores is provided in the "Method of Measurement" section in this document. II. Calculating the relative share of each answer option Each answer option in the data element is individually calculated and expressed in percentage values. The numerator is the total number of responses the respective answer option received.
	2	
	3	
Denominator:	1	I. Calculating change by using a differential percentage from the pre and post indicator score The denominator is the pre intervention score. A detailed description of how to calculate the pre intervention score is provided in the "Method of Measurement" section in this document. II. Calculating the relative share of each answer option

		The denominator is the total number of responses to the indicator question.
	2	
	3	
Disaggregation(s):	**1**	Age (17 and younger; 18-24; 25-29; 30-39; 40-54; 55-64; 65-74; 75 and over; Prefer not to say) Sex (Male; Female; Other or prefer not to say) Age/Sex disaggregates: 17 and younger male, 17 and younger female, 17 and younger other; 18-24 male, 18-24 female, 18-24 other; 25-29 male, 25-29 female, 25-29 other; 30-39 male, 30-39 female, 30-39 other; 40-54 male, 40-54 female, 40-54 other; 55-64 male, 55-64 female, 55-64 other; 65-74 male, 65-74 female, 65-74 other; 75 and over male, 75 and over female, 75 and over other; Prefer not to say male, Prefer not to say female, prefer not to say other
	2	Age (19 and younger; 20-29; 30-39; 40-49; 50-59; 60-69; 70 and over; Prefer not to say) Sex (Male; Female; Prefer not to say) Age/Sex disaggregates: 19 and younger male, 19 and younger female; 19 and younger prefer not to say; 20-29 male, 20-29 female, 20-29 prefer not to say; 30-39 male, 30-39 female, 30-39 prefer not to say; 40-49 male, 40-49 female, 40-49 prefer not to say; 50-59 male, 50-59 female, 50-59 prefer not to say; 60-69 male, 60-69 female, 60-69 prefer not to say; 70 and over male, 70 and over female, 70 and over prefer not to say; Prefer not to say male, prefer not to say female, prefer not to say for age - prefer not to say for sex
References:	Prosper Canada. (2012b, December 18). Final Report - Financial Literacy Evaluation Project	
Relevant populations:	Adults; Low and Middle income. Available in English	
URL:	This will be a DOI link generated by Zenodo when the Indicator Reference Sheet is posted. The DOI link will also be added to the 'How to cite this document' field below.	
Terms of use for the indicator:	To be confirmed	
How to cite this document:	Prosper Canada (2016): Change in ability to pay bills on time. Financial literacy indicator reference sheets. DOI when available. This document is licensed under a Creative Commons Attribution International License 4.0.	

Appendices

Interview protocol

Introduction & Background: [the interview will use a teleconference number]

Hello, this is Gillian Kerr. Thank you for agreeing to talk to me about the development of common set of financial literacy evaluation measures and a supporting online toolkit.

CONSENT

I'll just describe how I will be using the notes from our conversation. With your permission, I will be recording this call and sharing the recording with staff at Prosper Canada. We will be analyzing common themes to inform our work on financial literacy indicators. We will delete the recording at the end of this project.

The themes from the interviews will be summarized in a public report but will not be attributed to specific people. However, in some cases it may be possible to guess the speaker's identity from the content. If you are concerned about the confidentiality of any particular point, I can remove it from the report or we can discuss how to disguise the source.

Is that okay? Do you have any questions? [IF IT'S OKAY, START RECORDING]

[Interviews are open-ended and the questions are just probes and guides; most interviews will not address every question, but will follow up on interesting ideas and directions.]

Context:

[Walk through the background material and answer any questions about the project.]

Questions:

Get expert opinions/feedback on our initial list of indicators

1. Does the approach we are proposing make sense to you?
2. What is the minimum level of academic rigour that is required for each indicator in order to meet the national needs for measuring financial literacy/empowerment?
3. What are the minimum number of questions that would need to be asked for evaluating financial empowerment programs, and what would they be? For example, if an agency is providing employment, housing and financial literacy services, and needs to ask questions about all of them, which should be the core questions on financial literacy?
4. Do we need to pull in any other major sources for indicators beyond the ones we listed in the background material [go over them in the call]?

   [Probe: Are there any emerging research findings we should be aware of?]
5. How should agencies choose which indicators to use?

For practitioner respondents:

- What challenges do you think front line agencies might have in using a tool like this?
- Do you think this tool will be useful for developing your future Financial Literacy evaluation? What do you see as its benefits? Limitations?
- What recommendation do you have for ensuring that the end product we develop will be used by organizations who are evaluating their project?

Get advice on the process of how to approve indicators

6. In your opinion, how should we engage expert reviewers to approve or comment on the indicators?

Closing questions:

7. Is there anyone else we should talk to?
8. Is there anything else you would like to tell me?
9. Is there anything you have said that you would like me to leave out or disguise in the final report to make your comments more anonymous?
10. What are the most important issues to capture in my notes for this conversation?

Closing:

11. We've covered all the official questions I have. Did you want to add any other comments?
12. Is it okay if I name you as a key informant in our final report, without attributing specific comments to you? (If not, that's fine; we won't name you.) Are there any points you would like to withdraw from the final report? Any concerns about confidentiality or anonymity?
13. There will several opportunities for stakeholders to stay engaged in this project:
    - We will be developing an advisory committee to guide the project
    - We will be doing further consultation on the 'measures' and the design of the toolkit
    - We will be doing another round of key informant interview in help us select the indicators to be included in the toolkit

    Please let us know if you would like us to consider you for any of these future opportunities.

Thanks very much for your time.

[Prosper Canada sent a follow-up email thanking the respondent and following up with any questions or requests that came up during the interview.]

Key informants

The following interview informants kindly gave permission to include their names in the report.

Gene Chan, Civitas Consulting, Edmonton

Kant Desai, Cities for Financial Empowerment Fund, New York

Mary Griffin, Consumer Financial Protection Bureau, Washington DC

Nicky Grist, Cities for Financial Empowerment Fund, New York

Genevieve Melford, Consumer Financial Protection Bureau, Washington DC

Janet Murray, Resources for Results, Toronto

Sarah Parker, Center for Financial Services Innovation, Washington DC

Jennifer Robson, Carleton University, Ottawa

Louise Simbandumwe, SEED Winnipeg

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